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Mississippi Asl Project

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MISSISSIPPI ASL PROJECT: A SOCIOLINGUISTIC EXAMINATION OF AMERICAN SIGN LANGUAGE IN MISSISSIPPI

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ABSTRACT

American Sign Language (ASL) is a manual language used by many deaf people in the United States and Canada. For much of its existence, ASL was believed to be a system of rudimentary gestures and signs based on the English language. However, studies that analyzed the linguistic properties of this signed 'mode' (Stokoe, 1960) legitimized that it was a language independent of spoken language, with its own system of principles and elements to construct meaningful utterances. Like any language, ASL is influenced by the social demographics of its users. Social demographics such as ethnicity, geographic location, age, gender, and socioeconomic status are elements that cause variation in both spoken and signed languages. ASL is a young language created by a historically marginalized group of individuals as a way to communicate thoughts and ideas in a society designed on the ability to hear. As such, ASL was recognized as an autonomous language and has been the subject of sociolinguistic research since the 1960s. Most sociolinguistic research in ASL consists of large-scale studies has been conducted in the past 15 to 20 years. No research up to date has been conducted within the geographic boundaries of a state. This pilot study examines phonological and lexical variation of ASL in Mississippi through a series of Atlas-style interviews, and identities age and geographic location as the two most significant social influences that cause variation in Mississippi.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I
INTRODUCTION

American Sign Language (ASL) is a relatively new topic of study in sociolinguistics. Before the 1970s, ASL was perceived as a visual mode of communication based on spoken English. It was presumed that deaf people who did not (or could not) acquire proficient fluency in English or the ability to lip-read used a manual language (Feher-Proud, 1996; Holcomb, 2013, p. 100). However, studies that analyzed the linguistic properties of this signed 'mode' (Stokoe, 1960) legitimized ASL as a language independent of spoken languages. Over the subsequent years, linguists proved that ASL has its own system of principles and elements to construct meaningful utterances. This foundational research led to the recognition of the American Deaf community: a social group identifying itself as a linguistic and cultural minority that has existed in the United States since 1817 (Burch, 2000; Holcomb, 2013, p. 20). Recent research established that, like any spoken language, signed languages contain linguistic and social constraints that cause variation of language use among members of the Deaf community (Lucas et al., 2001; Lucas & Bayley, 2001; Lucas & Bayley, 2011; McCaskill et al., 2011). Among the linguistic constraints is evidence of variation at phonological, lexical, and morphosyntactic levels. Social constraints include age, ethnicity, geographic location, hearing status of parents, gender and education—including whether the deaf person attended residential schools for deaf students or were mainstreamed into public schools where the majority of students and staff were not deaf. While several studies provide evidence of variation of language use changing over time, very few studies examine the location of isoglosses or dialectal borders within a particular area (Lucas & Bayley, 2011).

This research is a pilot case study that will attempt to identify features of variation found in five regions of Mississippi by recording a series of pre-arranged interviews with members of the Mississippi Deaf community. Using the Linguistic Atlas Project and Ceil Lucas's seven-year variationist study as its framework, this research will attempt to identify phonological and lexical variation of ASL in Mississippi.

CHAPTER II
LITERATURE REVIEW

A. Historical Overview

Sociolinguistic research in ASL has been limited, in part, by both historical events that oppressed users of the language and by the small size of the population. Therefore, in order to understand current social influences within the Deaf community and its effect on ASL, it is important to highlight the historical context of deafness and sign language in a spoken language society. It is uniformly agreed that ASL started in the early 19th century with the establishment of the American School for the Deaf, formerly the Connecticut Asylum for the Education and Instruction of Deaf and Dumb Persons (Van Cleve & Crouch, 1989, p. 43; Padden & Humphries, 2005, pp. 16-17). Thomas Hopkins Gallaudet, a Congregational minister and Yale graduate, was hired by Dr. Mason Cogswell to travel to Europe to learn techniques of teaching deaf children so that a school for the deaf in America could be established. Cogswell's daughter, Alice, became deaf when she was two years old as a result of spotted fever and served as Gallaudet's inspiration to establish a school for the deaf. Prior to this endeavor, there were no established deaf schools in America, with the exception of a short-lived school on a Virginia plantation that only five students attended (Van Cleve & Crouch, 1989, pp. 24-37). Families with the financial means sent their deaf children to the Braidwood Academy in Edinburgh, Scotland, which utilized an oral teaching method in English rather than a signed language. Gallaudet focused his trip on the British Isles, and arrived in England in 1815. He found that the educational practices for the deaf were dominated by the Braidwood Academy, which had institutions in both Scotland and England.

Braidwood taught deaf students to read lips and use their voice to communicate (referred to as the *Oral Method* of education). Sign languages were strictly forbidden. Gallaudet was accepted as a teaching apprentice at the Braidwood campus in London. During this time, Abbé Sicard, head of the Royal Institution for the Deaf in Paris, was in London with two former students, Jean Massieu and Laurent Clerc (Van Cleve & Crouch, 1989, p. 34). The Royal Institute used a combination of sign language and oral methods to teach deaf students. Gallaudet was impressed by the language skills of the two former students whom he met. Thus, he went to Paris to study their teaching techniques. While there, Clerc suggested that he accompany Gallaudet back to America to teach. Gallaudet accepted the offer. The journey to America took one and a half months, in which time Clerc taught Gallaudet French Sign Language, and in turn, Gallaudet taught Clerc English. In 1817, the first American school for the deaf was established and utilized both oral and signed teaching methods (Van Cleve & Crouch, 1989, pp. 43-47; Padden & Humphries, 2005, pp.11-36). ASL is partially derived from *la langue des signes française*, or LSF and signs used by students at the deaf school. This was the point that the American Deaf community was established (Burch, 2000). The term Deaf is used when referring to the community of individuals who are audiologically deaf, use sign language as a primary means of communication, and subscribe to traditional norms and values of the group. Gaining popularity, other state sponsored residential deaf schools were established throughout the United States, employing both oral and signed teaching methods with an emphasis on sign language. The schools during the 19th century served two purposes: to educate deaf children and do so separately from children who were not deaf. At the time, deaf children were seen as bearing physical and mental affliction (Padden & Humphries, 2005, p. 18). Padden & Humphries (2005, p. 27) state:

> The nineteenth-century institution was a means of education as well as a separately organized *place* of education. It was conceived as a way to remove the afflicted—the deaf, the blind, the insane, and the criminal—"from the streets" where they were wont to wander without constraint, and place them in more regimented environments.

As residential schools increased, however, use of sign language as a mode of teaching steadily decreased as more educators who were not Deaf and did not understand the value of teaching through the use of sign language entered deaf schools (Van Cleve & Crouch, 1989, p. 47). In the latter part of the 19th century the use of sign language in residential schools for the deaf significantly decreased and by the 20th century was virtually nonexistent. According to Burch (2000), the agenda to eradicate the use and teaching of sign language in schools as a means of communication existed since the 1840s. She posits that after the Civil War, social and political reformers sought to create societal unity among themselves, immigrants, and other minorities through the use of one common language—English. By replacing sign language with lip-reading and oral communication, it was felt that deaf children could become 'normal' and be integrated into mainstream society. Through the success of Gallaudet and Clerc, the acknowledgement that deaf children could be educated encouraged parents, teachers, and politicians to pursue a goal of mainstreaming deaf children back into hearing schools and a hearing society. This ideology was perpetuated in the early 20th century when Alexander Graham Bell sought to banish sign language from schools, supporting the argument that the use of sign language prevented deaf children from being integrated into mainstream society. He persuaded politicians, parents and educators who were not deaf to adopt the aforementioned oral approach. Bell proposed that teaching deaf children to speak and lip-read narrowed the gap between deaf and non-deaf peers and normalized the deaf. Further, Bell promoted day schools as opposed to residential schools for the deaf in order to eliminate the spread of sign language in residential dorms. While the use of sign language was

prohibited, dormitories and private meetings with the few existing deaf teachers were one of the only means by which deaf students could learn and use sign language. By 1920, Oralism was the predominant means by which deaf children were taught. Over 80% of residential schools abandoned the use of sign language in the classroom and prohibited its use in residential dorms (Van Cleve & Crouch, 1989, pp. 106-107), although completely eradicating its use in the confines of dorms and in unsupervised meetings with deaf teachers was unsuccessful. This action contributed to the existing stigma of deaf individuals as being mentally or physically disabled. Many educational programs in mainstream schools still believe that signing is inferior to spoken language and prohibit its use among deaf children (Gannon et al., 1981). The American Deaf community rebelled against societal notions to reject their culture and language.

Residential schools for the deaf played a crucial role in the development of the American Deaf community. Acting as places in which parents could send their 'afflicted' children, they became safe havens that fostered a sense of belonging and community. According to Padden and Humphries (2005, p. 35):

> At schools for the deaf, Deaf students can sign with their principals and the office secretary. They can be tutored by the teacher's aide, and sign up for wrestling with a Deaf coach. Their teachers are often Deaf and were themselves educated at a school for the deaf, which allows them to offer shared experiences with students. Indeed, this is the most compelling characteristic of schools for the deaf: They offer education and community in sign language, and create for their students possibilities of social interaction that would otherwise be difficult or strained in a hearing school. In their "apart-ness," schools for the deaf offer safe harbor for deaf students who find being alone—or with a small group of other deaf peers immersed among hearing people—too difficult to endure.

During the latter part of the 19th century and early 20th century when Oralism was at its peak, Deaf teachers still employed at residential schools refused to communicate with their students solely

through spoken English and continued to sign. Many Deaf dormitory supervisors refused to enforce the no signing policy and communicated with the students in sign language. The community-based relationship students had at the deaf schools carried into their adult lives through the establishment of Deaf clubs, organizations, and churches. There they were able to continue their community through shared experiences and a shared language. These organizations acted as "centers of information, socialization, and cultural identity," (Burch, 2000) which allowed Deaf members to stay in touch and follow current events in the absence of communicative technology.

Deaf schools continue to play an integral role in the American Deaf community, but with the implementation of various educational laws (i.e. the Vocational Rehabilitation Act of 1973, the Individuals with Disabilities Education Act), more deaf students are attending mainstream schools with hearing peers than going to deaf residential schools. While parents have accommodations in mainstream schools that theoretically provide equal access to their children, Deaf parents of Deaf children often still opt to send their children to residential schools so that the children may be taught by other like-minded individuals and avoid the social and linguistic isolation that deaf students often face at mainstream schools. While enrollment at residential schools for the deaf has declined with the implementation of accessibility laws, they remain at the crux of the Deaf community's history and are still considered cultural centers for local Deaf communities. Also supporting the maintenance and growth of cultural traditions and norms, Deaf organizations continue to be a prominent means by which community is based. For instance, the National Association of the Deaf (NAD) was established in 1880 and continues to serve as America's largest civil rights organization for d/Deaf people ("National Association of the Deaf: About Us," n.d.).

Despite the many struggles for cultural equality for the Deaf community, the negative sociohistorical views of deafness and sign language fueled by Bell's mindset and mainstream ideologies continued into the 20th century and still exist today. The current perspective of deafness as a disability is pervasive in both legal and medical fields. Doctors are often influential forces for hearing parents with deaf children. The majority of deaf children are born to hearing parents, who have no prior knowledge of ASL or Deaf culture (Feher-Prout, 1996; Holcomb, 2013, pp. 38-40). These parents tend to take a pathological approach to 'cure' their child's deafness through assistive auditory devices and speech pathology training, which reinforces the bias that deafness is a disability that needs remediation (Feher-Prout, 1996). Laws such as the Americans with Disabilities Act of 1990 (ADA), offer communication accessibilities to deaf people that use sign language as their primary means of communication under the label of deafness as a disability. These hegemonic ideologies unknowingly promote an *audist* mentality, a term coined by Dr. Tom Humphries in 1975 which means "the notion that one is superior based on one's ability to hear or behaves in the manner of one who hears" (Holcomb, 2013, p. 245). Audism contradicts the view held by many d/Deaf ASL users, who instead see themselves as a linguistic and cultural minority with social restrictions placed on them by a hegemonic society that does not understand their cultural and linguistic complexities, with a view of residential schools for the deaf as the crux of cultural autonomy (Burch, 2000, p. 67; Holcomb, 2013, p. 245). In order to separate themselves from the negative stigma associated with the word *deaf*, individuals belonging to this cultural and linguistic community began using a capital "D" for Deaf to show language and communal pride. Burch (2000) states that unlike other cultural groups, Deaf children are rarely born into the Deaf culture. In fact, researchers state that over 90% of deaf people are born to families without

knowledge of Deafness (Burch, 2000; Holcomb, 2013, pp. 38-40). Thus, general American society struggles to accept Deaf people as being part of a culture rather than disabled individuals.

B. Linguistic Studies

Unlike groundbreaking research in American English that began in the 1920s in New England (Kretzschmar, McDavid, Lerud, & Johnson, 1994, pp. 1-4), historical events and inaccurate perceptions of Deaf people and sign language have contributed to the delay in ASL linguistic research. Most linguistic and sociological research studying ASL began in the late 20th century after Labov's foundational Martha's Vineyard study (Labov, 1963).

In the 1960s, William Stokoe's pioneering research at Gallaudet University suggested that, despite its early characterization of being a deficient means of communication, ASL is an autonomous language, containing its own complex linguistic structures independent of English or any other spoken language (Stokoe, 1960). Signed languages have the same linguistic structures as spoken languages, but in visual components rather than spoken. Recognizing that ASL has no written form (and due to the previous lack of visual technological equipment), Stokoe created a notation form for ASL that used English alphabet characters to describe the structure of signed items for detailed linguistic analysis (Stokoe, 1960). Linguistic structures such as phonology, morphology, and syntax are identifiable components of ASL and can be used to conduct linguistic analysis. Stokoe's foundational studies, as Labov's work in Martha's Vineyard and New York with American English (Labov, 1963; Labov, 1972) paved the way for sociolinguistic research in ASL. Further, Stokoe's studies suggested deafness and signed languages be seen from a cultural perspective rather than pathological.

Variationist studies conducted in the 20th century on spoken languages also provide a framework by which sociolinguistic studies in signed languages can be conducted. Under the direction of Hans Kurath, the Linguistic Atlas Project (LAP) was founded in the 1920s, with field work that began in New England and moved throughout the eastern portion of the United States (Kretzschmar et al., 1994). The LAP surveys were conducted in order to find lexical variation through identification of common household items and other common topics, modeled from European surveys (Montgomery & Nunnally, 1998, pp. 9-16). LAP research expanded throughout the states on the Eastern coast and collected data from the middle and south Atlantic states, as well as the Gulf States, and now covers all of the mainland United States. The databases constructed with the responses from the interviews were used to distinguish isoglosses by identifying lexical and phonological characteristics found throughout the states.

Further, researchers using the Atlas data were able to take particular lexical items and trace their evolution in order to identify changes in lexical and phonological features. For example, Johnson (1996) conducted a study measuring lexical change and variation from the data recorded in the Linguistic Atlas of the Middle and South Atlantic States (LAMSAS) collected in the 1930s to data that she collected in 1990. She chose 150 lexical items to analyze and collected data from 78 informants from the same communities as LAMSAS: Georgia, North Carolina, and South Carolina. Her study yielded results that showed diachronic lexical change and variation through social constraints of education, age, region, social group, gender, and ethnicity. Burkette (2011) employed the *cornbread* databases from LAMSAS and the Linguistic Atlas of the Gulf States (LAGS) to investigate the varying lexical items that informants used to identify the item baked in a large cake made of cornmeal. She posits that the variation found is a result of the age and region of the informant, as well as the physical appearance, function, and method of manufacturing

(Burkette, 2011). The framework by which these studies were conducted yield themselves to variation and sociolinguistic studies of ASL, which has the potential to uncover language variation similar to that found in the Atlas studies.

Studies examining sociolinguistic variation in ASL reveal that, like all natural languages, ASL contains variety reflective of the linguistic and social constraints of its users. As previously stated, however, sign languages reflect a Deaf culture and will have different language policies and constraints than those found in spoken communities. For instance, the hearing status of a deaf person's parents may be an influencing factor in terms of when and where the deaf person learned ASL. Further, the hearing status of parents is an influencing factor in overall language acquisition. Investigation on literacy rates among African American deaf students and Caucasian deaf students suggest that hearing parents of deaf children are primary influences in language acquisition (Meyers et al., 2010). Other studies, however, focus on the internal and external constraints found in ASL through a series of variationist-style interviews with Deaf ASL users. Research conducted in the late 1970s assert that racial segregation in the school systems contributed to signing differences among African American and Caucasian deaf individuals in the South, showing that African American deaf individuals used older sign forms comparable to that of older Caucasian deaf individuals (Woodward, 1976). Lucas and Bayley (2011) state that historical factors play vital roles in the development of variation. African American English is an example of historical contribution, in that it is a variety that developed, partially, due to the educational segregation of the 20th century. Likewise, African American and Caucasian deaf people were also segregated, which lead to varying features in ASL among African American signers. The Mississippi School for the Deaf in Jackson, MS, for instance, was established in 1854 and segregated in 1882 through the establishment of a separate department within the school (McCaskill et al., 2011, p.20). Black

ASL is now considered a distinct variety of ASL with phonological, lexical, and semantic features that differ from 'standard' ASL, and has recently become a topic of interest for ASL linguists (McCaskill et al., 2011; Lucas et al., 2001). These studies parallel the differences in Standard American English and African American English (AAE), which indicate lexical and phonological features of AAE are comparable to features employed by older White speakers, as a result of segregation in the educational systems (Mufwene et al., 1998, pp. 85-109). Other sociolinguistic research in ASL posits that, despite the time span between segregation and the 21st century, differences in phonological, morphosyntactic, and lexical constructions are present between African American and white signers, as are body movements and facial expressions (Lucas et al. 2000).

In the 20th century, studies of ASL were limited by the availability and ability of video-recording devices and computers. The increasing rate of technological innovation in the 21st century lends itself to aid in sociolinguistic variation studies of ASL. The use of corpora to study ASL has grown in popularity within the past fifteen years. Gallaudet University linguists, Ceil Lucas and Robert Bayley (2001), conducted a seven year study in seven metropolitan areas throughout the United States to identify variation in ASL. Using an ASL dictionary as a control, results suggested that phonological, morphosyntactic, lexical differences in American Deaf signers are based on age, ethnicity, geographical location, and education. In 2011, another study collected a series of spontaneous conversations from various publications of Deaf people to assess the conditions that may contribute to sign-lowering, a process by which a sign does not reach its target location. Lowering occurs when a sign that is originally produced in a higher location (i.e. the side of the head) is signed in front of the signer near the chest (Lucas et al., 2001, p. 346). Analysis

suggested that sign-lowering is both phonological and categorical: influenced by sign environment, rate of sign, and interlocutor influence (Russell et al. 2011).

Other research suggests that, while ASL continues to have regional variation, it is possible that it is becoming more standardized with the advent of the interpreting profession and increase in technological innovations for the Deaf culture. Palmer et al. (2012) posit that through the use of videophone services that allow ASL users to hold conversations via interactive video technology, signers in different geographical locations are able to hold conversations in their native language. This increases the instances of contact with different regionalisms found in ASL. In addition, the use of sign language interpreters via videophone service providers can contribute to language standardization. Language attitudes of interpreters working in Video Relay Services (VRS) are possible contributors to the continuation or obsolescence of regional variation in ASL. Interpreters make discreet decisions during an interpreted phone call by accepting and using the regional signs of the Deaf consumer throughout a call or ignoring regional signs and replacing them with signs used in the interpreter's region.

The rapid advances in technology also affect traditional methods of ASL analysis. Stokoe, the founder of the notation form used to 'write' ASL, claimed that phonology and semantics were inseparable. He proposed Semantic Phonology, a theory based on semiotics that posited that combined phonological elements were "signifiers" and the meaning extracted were the "signs" (2001). While it is known that a sign may have multiple phonological and lexical variants, the semantic joining can be viewed in context to provide a broader meaning. Semantic joining occurs when a signer uses a particular variant of a sign to match the context of what is being stated. Stokoe suggested that, with the advances made in technology, one should abandon the traditional notation system of analysis and opt for analysis via video recordings in order to capture body movement

and facial features that contribute to the signed utterance. Describing them in any other way would limit the description. Further, he posed a simplified method for analyzing and describing signs as semantic phonological nouns and verbs, in which the sign itself acts as an agent-verb construction. The agent is the component that acts and the verb is the action performed by the agent. He states that semantic-phonological (s-p) verbs can be transitive or intransitive, which is determined by the presence or absence of an object or patient. The traditional agents in a signed utterance consisted of the arm and hand. This method, however, allows the inclusion of agents to other manual and non-manual agents such as eyebrows and tongue. The eyebrows alone are considered nouns, but when furrowed or raised they become a verb. The tongue is considered a noun, but if it protrudes or takes action it is considered a verb. The only restriction in this method is due to the physical limitation of the human body (Stokoe, 2001). Since the publication of his article, technological innovations have continued to grow rapidly, legitimizing the implementation of his theory of Semantic Phonology. While the Stokoe notation system has been used and taught to most sign language classes and those studying ASL linguistics, it will not be used in this study, as it would require the use of specialized font software to produce the notation symbols and would only duplicate data already documented in its preferable form.

Another innovation is the system of noting movement. ASL researchers (Valli et. al, 2005, pp. 34-38) refer to the Movement-Hold Model, a system developed by Scott K. Liddell and Robert E. Johnson that labels the structure of signs and their sequences. While the system is complex, it describes the sequence in which handshape, location, orientation, and non-manual signals are represented. Holds are the part of signs in which a handshape is held in a particular location. Movement is the direction and way in which a sign transitions from one segment, or part, to another. A sign may only have one hold or one movement, or may have multiple holds or

movement (Valli et. al, 2005, p 34). Likewise, variants of a sign may add or delete a particular segment of a sign to suit the user's needs.

C. Technology's Impact on ASL

While rapid increases and improvements to technology increases the ability of the researcher, its use in research, particularly with the Deaf community, must be considered. Most sociolinguistic and variationist studies on ASL use video equipment to record instances of conversation or other signed utterances. Since ASL employs the use of facial expressions and body language to satisfy the morphological requirements of language, the deletion or censoring of the face may pose significant issues in accurate findings. Since researchers need to obtain a signed consent form before proceeding with filming a subject, issues of comprehending a consent form are raised.

Crasborn (2010), in response to a study using sign language corpora to investigate Norwegian Sign Language (NGT), discussed the ethical considerations for publishing sign language corpora. Crasborn studied whether deaf informants with various levels of literacy could give informed consent to have their image and utterances reproduced. The consent form was interpreted into sign language, yet Crasborn wondered if this method was enough to guarantee that the deaf individuals fully comprehended the future impact of publication in the era of rapid technological developments. As time progresses, publications of sign language corpora will have the potential to be republished by varying sources, which would increase the availability of the material to the general public, but may violate the personal rights of an informant. Since many technological developments were only recently made available in a visual media, lack of first-hand experience may contribute to an informant's inability to waive rights knowingly or to understand the potential future impacts of consenting to the publication of sign language corpora. While

quantitative research in corpora allows for other identifiable content to be coded and made anonymous, informants are still able to be identified by the visibility of their faces. Crasborn suggested that full disclosure of the study in both written and signed consent forms is crucial to ensure full comprehension of the study and its potential. Further, he stated that the informants should have the ability to revoke their original consent and have their contributions pulled from the corpus at any point before or after publication.

D. Variation in the Mississippi Deaf Community

The goal of variation studies is to describe the patterns of linguistic structure in a given speech community. Lucas and Bayley (2011) posit that the most significant research regarding sociolinguistic variation in ASL has been conducted within the past fifteen years, all of which were conducted on a large scale in order to generalize the possible internal and external constraints for linguistic variation. These foundational studies pave the way for further, more detailed research. Large-scale studies provide sociolinguistic variation in widely used sign languages, however, more in-depth studies of particular communities need to be conducted to offer more insight into various local Deaf communities. The goal of this case study is to conduct an in-depth analysis on the variations found in the Mississippi Deaf community. Conducting this study within various regions of the state will offer more insight on the internal and external constraints found in ASL and its users. This study will focus on phonological and lexical variation and include suggestions for further research conducted in this manner so a more detailed analysis of ASL variation can be undertaken. The internal constraints of this study will highlight features of free variation—metathesis—of signs indicated in past studies (Valley, Lucas, & Mulrooney, 2005, pp. 42-44) and the linguistic environment in which they occur. This research, along with studies previously

conducted, offer benefits both to deaf people and professionals that work with deaf people. It will further legitimize that ASL is a real language independent from spoken American English. The study will offer benefits to deaf educators, sign language interpreters, and linguists by providing a more thorough background into the cultural and linguistic complexities of ASL and its users. Along with past studies, this research can be a future reference by which language change is documented.

E. ASL Linguistics & Grammar

In order to understand the full extent of this study, it is important to have a description of the linguistic components of ASL, a working knowledge of its grammar, and how they work together to form the complex visual language that is the focus of this investigation. Since phonological and lexical variation are the primary features of variation being investigated, particular attention will be paid to the means by which they are formed.

1. Phonology

In spoken languages, phonology is the study of sounds structures in a language, whereas in signed languages, phonology consists as elements of the visual structures that create a sign. There are five basic phonological elements used to create a sign: hand shape, location, orientation, movement, and non-manual signals (facial and body expression used as components of language). These elements are comparable to phonemes in spoken languages, which is the smallest unit of sound (Valli, Lucas, & Mulrooney, 2005, p. 17). It should be noted, however, that non-manual signals are applied to both phonology and morphology. Phonologically, non-manual signals are a basic parameter in a sign. Many signs require them in order to be correctly produced. They are

considered morphological because they provide meaning at both a lexical and sentence level (19). Sign language parameters, like allophones sounds in spoken languages, may change without affecting the meaning of the sign. Likewise, the difference in a sign parameter may completely change the meaning of a sign as changing phonemes does in spoken languages. Figures 2.0, 2.1, and 2.2 illustrate the way that phonological variation may or may not affect the meaning of a sign. Figure 2.0 shows the standard way to sign DEAF (please note that ASL glossing appears in all-caps when written) with the index finger of the dominant hand touching the ear, then moving to the mouth, known as *citation form*—the form found in most ASL dictionaries (Lucas, Bayley, & Valli., 2003, p. 27). However, the process may be reversed to touching the mouth first and then the ear, without affecting the sign's meaning. This reversal is called *non-citation form*, and is considered a form of free variation—also known as *metathesis.* (Valli, Lucas, & Mulrooney, 2005, p. 42; Lucas, Bayley, & Valli, 2003, pp. 18, 27). Lucas, Bayley, & Valli (18) state: "This rearrangement of the location…is similar to what users of spoken languages do when they say [hʌnəɹd] instead of "hundred."

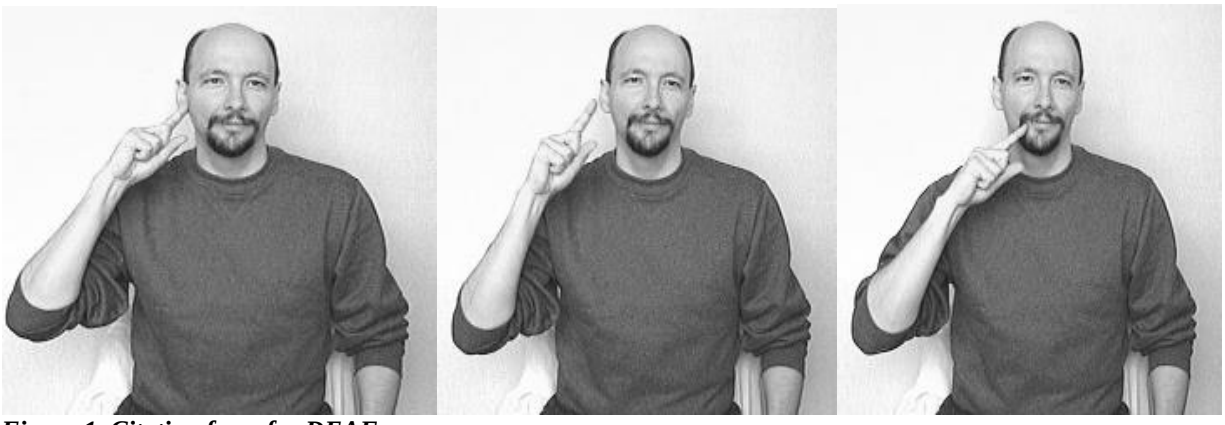

Figure 1. Citation form for DEAF

Figure 2. Citation form for SUMMER

Figure 3. Citation form for UGLY

Figures 2 and 3 illustrates how a parameter difference can affect meaning. Here, the difference between SUMMER and UGLY is in the sign location; movement, orientation, and hand shape remain the same (please note the difference in facial expression, as this is a morphological contribution to modify adverbially the sign for UGLY).

2. Morphology

Morphology is the study of word (or sign) formation in a language and how it forms meaningful utterances. In ASL, morphology gives meaning to a performed sign through facial expressions, mouth movements, and head movements (i.e. non-manual signals). Like morphemes in spoken language, ASL morphemes can either be free or bound (Valli, Lucas, & Mulrooney,

2005, pp. 49-50). Signs that have meaning without being attached to another sign are considered free and signs that must be connected to another sign are considered bound. Further mirroring linguistic components in spoken languages, ASL has derivational and inflectional morphology. Derivational morphology makes new units for a language, which brings about semantic change. For example, adding the suffix *–er* or *-ed* to nouns or verbs in English. Figure 4 illustrates how the derivational morpheme *–er* is applied in ASL by changing TEACH to TEACHER. The ASL sign for TEACH is made with two flat O hands on either side of the temple, moving forward several inches. The movement is usually repeated, depending on context or meaning. The sign may be lowered, starting near the cheek instead of the temple, as a result of the location from the preceding sign (Russell et al., 2011). The *–er* morpheme is constructed with flat hands facing each other, moving down the trunk of the body to indicate a person.

Figure 4. Citation form for TEACH

Figure 5. Citation form for PERSON. When added to a verb such as TEACH it becomes TEACHER.

Figure 6. Citation form for STUDY

Indeed, by taking certain nouns and verbs and compounding them with PERSON, a signer changes the verb into a person's identity. For instance, ART-PERSON is the ASL equivalent to the English *artist*, as LEARN-PERSON is the equivalent to the English word *student*.

Taking two words (or signs) and putting them together is referred to as *compounding* (56), and is prevalent in both American English and ASL. As in English, when two free morphemes come together in ASL, a new meaning is formed. In analyzing the two compounded signs, it is possible to understand how each sign lends itself to the new meaning. For example, the ASL equivalent to the English word *parents* combines the signs MOTHER and FATHER. Another

example is the English word for the Christian *Bible*, constructed in ASL with the signs JESUS and BOOK. While some meanings may be easy to predict in compounding, others may not. For instance, the signs THINK and MARRY combine (THINK-MARRY) and translate to the English word *believe* (58-59).

Inflectional morphology adds grammatical information to already existing lexemes. In American English, the morpheme *–s* adds plurality to a noun or verb (*cats, walks, reads*). In ASL, inflectional morphology is shown through aspect and indicating verbs. Aspect is from the predicate and describes how its action is performed. For example, the ASL sign for STUDY is signed by orienting the palm of the non-dominant hand upwards as if it were a book or piece of paper, while aiming the fingers of the dominant hand towards the open palm and wiggling them. If a signer wanted to sign the utterance STUDY-A-LONG-TIME, an outward circular movement sequence would be added to the sign to inflect repetitiveness (Valli, Lucas, & Mulrooney, 2005, p. 111). Morphological meaning shown on the face—non-manual signals—supply meaning to certain signs and phrases. For example, when asking a *wh-* question (*who, what, where, when, why,* and *how*), the eyebrows will be furrowed, shoulders are raised, and the signer's head will extend slightly forward. When asking a *yes/no* question, the eyebrows are raised and the head is slightly moved back (127-128).

3. Syntax/Grammar

Syntax is the order in which words or signs are produced to form meaning. Valli, Lucas, & Mulrooney (113) state: "One of the interesting things about language is that a finite set of rules is used to produce an infinite set of sentences." Like spoken languages, ASL grammar consists of the principal parts of speech (nouns, verbs, adjectives, adverbs, and preposition). Further, they

states that the lexical components of ASL grammar can be categorized into four major lexical groups (nouns, predicates, adjectives, and adverbs) and five minor lexical groups (determiners, auxiliary verbs, prepositions, conjunctions, and pronouns). The minor lexical groups are considered minor because they have little meaning outside of their grammatical purpose (118). ASL typically follows a Subject Verb Object (SVO) word order. Sometimes the subject and object may be reversed, which is referred to as *topicalization* (84-85), with aspects of time occurring at the beginning of the sentence (ex. YESTERDAY, TODAY, or TOMORROW). However, past actions are indicated with the FINISH adjective at the end of signed action. For example, the English sentence *I am going to the store* would be signed STORE-ME-GO, and the sentence *I went to the store* or *I went to the store yesterday* could be signed STORE-TOUCH-FINISH, or YESTERDAY-STORE-TOUCH-FINISH (the TOUCH sign in this context indicates the signer has already been to the store).

4. Nouns

As in all languages, nouns in ASL identify person, places, things, and ideas, identifying both concrete and abstract things. Nouns in ASL do not have pluralizing suffixes as English. To show plurality, ASL will either use determiners or will reduplicate the sign (114). Sign for nouns often are reduplications of verb signs. For example, the ASL signs for the verb SIT (see Figure 7) and the noun CHAIR are the same, but with SIT having a single motion and CHAIR having a double motion. Nouns and verbs that differ only in sign reduplication are termed *noun/verb pairs*.

Figure 7. Citation form for SIT (the movement would be repeated to sign CHAIR)

5. Predicates

ASL predicates can be categorized into four parts: simple predicates, predicate nouns, predicate adjectives, and auxiliaries used with predicates. Unlike English, ASL does not require a verb as a part of the predicate. For simple predicates, if a sentence only contains a subject and verb, the verb will act as the predicate. Nouns become predicate nouns if they say something about the subject, as do adjectives (115). Adjectives are, typically, placed before a noun, but will become predicates following the noun (115-116). Predicates in ASL can also combine with auxiliary verbs, and can precede and follow a predicate (116). Auxiliary verbs provide tense and aspect information, and are at the beginning or end of a sentence (120).

6. Verbs

As in spoken languages, verbs in signed languages show states of being and actions. Verbs in ASL fall into three groups: plain, indicating, and depicting, which form the basis of ASL sentence structure (76). Plain verbs are made in one location and cannot be changed without changing the sign's meaning. Further, they do not contain any information about the sentence's subject or object.

As previously mentioned, indicating verbs are verbs that show reciprocation and location, and are thus called *reciprocal verbs* (78) and *locative verbs*—also called *directional verbs* (79). Reciprocal verbs consist of an action being performed by 'two' people represented by the signer. Valli, Lucas, & Mulrooney cite the ASL phrase LOOK-AT-EACH-OTHER in each hand represents a person looking at the other, stating: "The fingers of the right hand point directly at the fingers of the left hand, thus showing how each person is surveying the other with their eyes" (79).

Depicting verbs, as the name suggests, show the verb's action or state through sign location, shape, and movement. These verbs are also called *classifier predicates* (80), 'combine' individual signs, taking on certain hand shapes, to indicate the action performed. A classifier is a series of hand shapes that combines the remaining four phonological parameters (location, orientation, movement, and non-manual signals), and can be used to form a predicate. For example, the English sentence *A car drove down the road* would use a particular hand shape to depict the car, and use and outward movement to represent the car driving down the road.

Figure 8. Classifier hand shape (CL:3) used for CAR

Indicating verbs—also called *directional verbs*—indicate the object in which the verb is being performed. For example, the phrase I-TELL-YOU (see Figure 9) will construct the verb in the direction of the object YOU. The ASL sign for TELL is produced with the extended index finger of the dominant, facing inward, and moving towards its object. For the direct object HE/SHE/IT,

the sign will move in the direction of the object. For the phrase TELL-ME (see Figure 10), the sign will move in the direction of the signer (76-77).

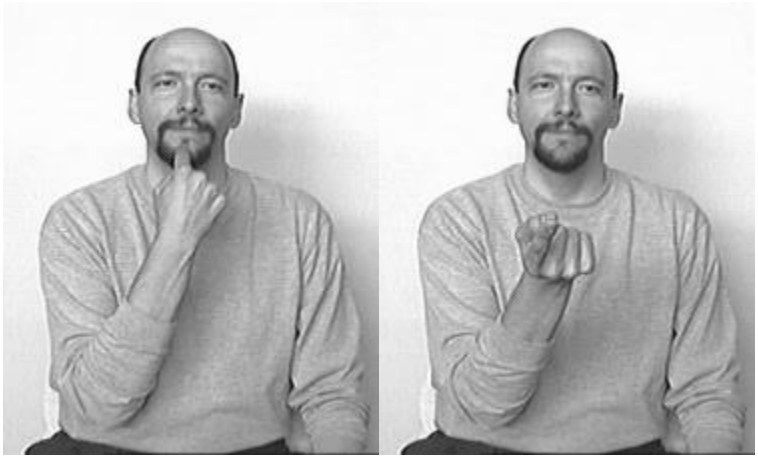

Figure 9. Citation form for TELL-YOU

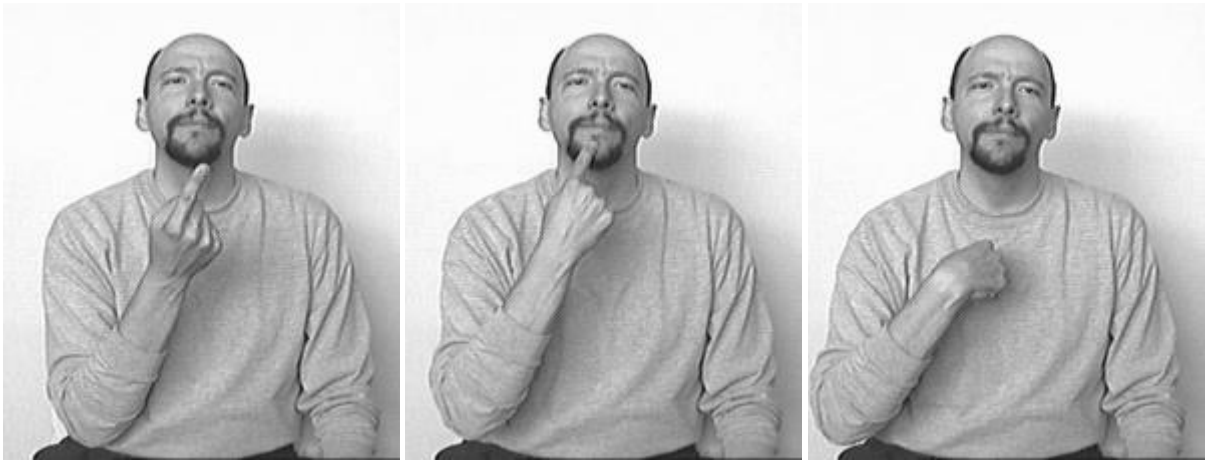

Figure 10. Citation form for TELL-ME

7. Adverbs

Adverbs use non-manual signals to modify adjectives and predicates in ASL grammar. Valli, Lucas, & Mulrooney (116) state: "…it seems that in ASL, the features of a sign that carry adverbial meaning often are incorporated directly into the structure of the adjective sign or the

predicate sign." In this, a sign may be extended or prolonged, and marked with a particular facial expression. For instance, FAR and VERY-FAR (see Figure 11) are produced the same, but in VERY-FAR the active (moving) hand extends well past the passive (stationary) hand and is marked with an open mouth with the tongue moving side to side (117). Headshaking is considered both adverbial and morphological, as it changes the meaning of the sentence. The English sentence *I am not hungry* would be signed HUNGRY-NOT with a negative headshake occurring with the sign for NOT (117).

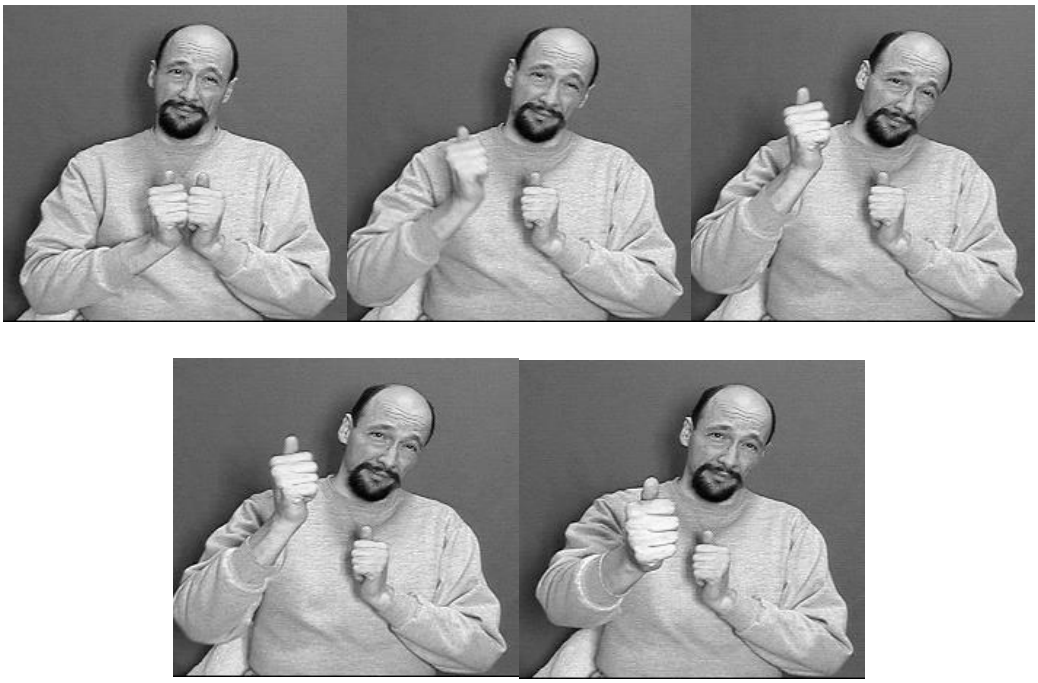

Figure 11. ASL sign for FAR (to produce VERY-FAR the signer would have an open mouth with side to side tongue movement)

8. Determiners

Determiners in ASL do not have individual signs, as English determiners have individual words such as *a, an,* and *the*. Instead, determiners use a particular type of sign—*pointing signs*—because the signer will point to a noun that is physically present (ex. a person or thing) or assign a

location to an absent noun (i.e. a person who is not there) by pointing. Pointing to a non-present noun services a dual purpose as a determiner and an indexical. Indexing occurs when a signer refers to a person, place, or thing that is not physically present by pointing, assigning the absent entity an abstract location that can be referred to when needed. In the same manner as English uses *the*, pointing signs are only used to refer to a specific noun. Determiners such as the English *a* or *an* do not refer to a specific noun, rather, to a particular class. Therefore, ASL users do not use pointing signs, and instead are inferred in the same sign as the noun itself (118-119).

9. Conjunctions

Conjunctions in ASL include BUT, UNDERSTAND, OR, and PLUS which join words or phrases of the same category (121). The signed equivalent to the English *and* is also used, but is considered a lexicalized conjunction borrowed from English.

10. Prepositions

Prepositions in ASL are shown with classifier predicates, agreement verbs, and pointing. A classifier is a series of hand shapes that combines the remaining four phonological parameters (location, orientation, movement, and non-manual signals) to form a predicate (91). For example, the English sentence *The man walked on the road* would be signed MAN-WALK, The predicate is WALK, and the classifier, MAN, is the index finger extended while bending and moving up and down with the hand moving forward to resemble a person walking. ASL has many classifier predicates, as it is one of the ways new signs are created (95). Unlike English, ASL does not have many independent signs for prepositions and, instead, use predicates—called *prepositional predicates*—to infer meaning. Pointing, however, is the signed preposition that most closely

functions like an English preposition, similar to *at* (121). A similar prepositional predicate is illustrated in the English sentence *The car is driving on the road* in which the CL:3 classifier previously mentioned acts as the car, and moves forward in a straight (or curvy) movement as if it is in motion on a road.

11. Pronouns

Pronouns represent a noun that has previously been identified. English uses words such as *he, she, it, him, her, they, them, we, us, his, you, yours, hers, theirs,* etc. In ASL, since these nouns have already been identified, they have been also been indexed and given a particular location within the signer's signing space—an area around the signer's body that acts as the physical location where the signs take place (i.e. the phonological parameter of location). Indexes usually are in a neutral location in the front or to the side of the signer. The English pronouns *he, she, it, him, her, you, me, them, they* and *I* use a pointing sign. For plural pronouns, a sweeping motion is made with the sign to indicate more than one person. Possessive pronouns are also indexed, but are signed with a flat open hand in the direction of the indexed person(s). For example, the difference between YOU and YOUR in ASL is hand shape, which changes from the index finger pointing at the person to an open flat hand with the palm facing the person (122-124).

CHAPTER III
RESEARCH METHODS

A. Goals

The goal of this study is to identify phonological and lexical variations used by Deaf ASL users in Mississippi. The data consist of lexical targets collected from interviews comprised of both informal conversational questions and structured target item identification questions in which the informant signed the ASL equivalent to a picture or word. Many of the lexical targets solicited in this study have been identified in previous studies as items with noted lexical and phonological variants (Lucas, Bayley, & Valli, 2003, pp. 18-53; Palmer, Reynolds, & Minor, 2012). In choosing target items that were representative of the Mississippi Deaf community, both regionally and culturally, this study aimed to highlight some of the linguistic features employed by Deaf Mississippians and the possible correlations with various social factors such as age, ethnicity, geographic location, socioeconomic status, education, and gender.

B. Interviews

In order to collect viable data, this study consisted of multiple interviews containing both informal conversation and Atlas-style interview questions from Deaf informants that use ASL (see Appendix 2. for a short biography on each informant). The question portion consisted of questions about familial relationships, growing up deaf, education, memories, and experiences, so that demographic data could be gathered regarding the possible external constraints that influenced

language use. While they were not a focus of this study, the utterances elicited during this portion of the interview could be used in future research to understand better the influence of internal constraints on language variation (Kachru, 2008, p. 5). A series of questions resembling the interview schedule of the Linguistic Atlas Project were employed to solicit lexical items with possible phonological or lexical variants. Unlike LAMSAS or Johnson (1996), who used shotgun-style questions to elicit lexical targets, this study utilized a series of photos and words commonly found and used in the United States, particularly in the South. In order to elicit lexical targets from a visual language, photos were a more appropriate choice. ASL is a visual language not based on a spoken language. Photos also eliminated the need for interviewers to ask questions which, expressed in ASL, could influence the informants' responses. Glosses, which are the English equivalents of signs, were used if an accurate photo could not be found or if the target was best represented by text. The words presented were not intended to test the informants' level of literacy in English, but were used because there were no suitable pictorial equivalents (See Appendix 1 for interview schedule).

Before the interviews were conducted, each informant was given a consent form that explained the scope of the study, its goals, and methods of data collection. This form also contained clauses of confidentiality and possible social risks associated with the interview. Facial expressions and mouth morphemes are integral parts of ASL that must be included when analyzing the properties and use of the language. The interviews were video recorded and the informants' faces were not censored, thus, informants' identities could not be fully concealed. An explanation that the informants might withdraw from the study at any time and request that their contribution not be included in the research was also included. The consent form was presented in both a written

and signed form to ensure full comprehension, as English is typically the second language of Deaf ASL users.

C. Informants

In order to reduce the cultural distance between the interviewer and informant, four individuals from the Deaf community were recruited to conduct the interviews. Additionally, using a Deaf interviewer ensured ASL reduced the risk of style-switching and helped reduce the possible nervousness of being recorded. The use of Deaf interviewers combined with the organization of the interview was an attempt to "divert attention away from speech, and allow the vernacular to emerge" (p. 209). Deaf interviewers are cultural insiders, while people who can hear—regardless of ASL fluency—are considered outsiders. The only exception to this rule pertains to hearing children born to Deaf parents. With regard to other cultural considerations, it was essential to engage the services of a person from the community in which the interview was being conducted. Using someone from the same community and cultural background helped reduce the possibility of responses being inhibited by cultural or linguistic differences. Labov's (1972) study with Black English Vernacular in the inner city of New York uses Black fieldworkers to conduct interviews with Black informants. Labov stated:

> In our own group competence is divided between white researchers (Labov and Cohen) who are primarily linguists and outsiders to the vernacular culture, and black researchers (Robins and Lewis) who know the culture of the inner city as full participants and share a deep understanding of it, but who remain relative outsiders to linguistic theory. There are advantages to that combination, especially when it is coupled with controlled sociolinguistic methods; but we are looking forward to the deeper penetration that can be achieved by linguists from the black community. (xiv)

Therefore, for interviews with Black ASL users, this study recruited a Black Deaf person from the Mississippi Deaf community to conduct interviews, as past studies (Woodward, 1976; Lucas et al., 2001; McCaskill et al., 2011) show Black ASL as a distinct variation of ASL.

The interviewers were trained to conduct interviews by participating in a simulated interview. These training sessions offered the trainees the opportunity to make suggestions and give feedback on ways to improve the interview process, as well as suggest possible lexical items to add to the interview schedule. The total of four interviewers also helped to find Deaf individuals willing to participate in the study.

Like many Deaf communities, the Mississippi Deaf community is small compared to mainstream society. Before the advent of communicative technology for deaf people, members of the Deaf community established clubs and social organizations in order to meet with friends and other members of the community to share experiences and to learn of recent events from other places without the reliance of written English or an interpreter. This tradition, while decreasing in younger generations of Deaf people due to the advent of Deaf-friendly technology and mainstream schools, is still a vital source for older generations of the Deaf community. With this in mind, the investigator attended organizational meetings and introduced the scope of this study to attendees. Social media sites were also used to recruit volunteers. Since the Deaf population in Mississippi is unknown (but perceived to be marginal), the only criteria considered for the informants was to be at least 18 years of age and to be a current resident of Mississippi. Placing further demographic restrictions on potential informants could have significantly limited the amount of data collected.

D. Speaker Variables

The design of this study was to recruit approximately 25 informants from around the state. The study attempted to recruit informants who would accurately represent the ethnic diversity and gender ratio of the geographic regions in which data was collected. In order to determine the appropriate ratio for a given population, the study utilized demographics obtained in the 2013 Mississippi Census. Demographic information was recorded regarding the number of men and women, and the percentage of Caucasians, African Americans, and Native Americans residing in each county. Unfortunately, the size of the population and willingness to participate in the study did not yield a true representation of the ethnic diversity and gender ration. Other social factors such as age, socioeconomic status, and hearing status of parents were not initially equalized due to the small population of the community.

E. Region

The state was divided into five geographical regions: Northern, Delta, Central, Southern, and Coastal (see Figure 12).

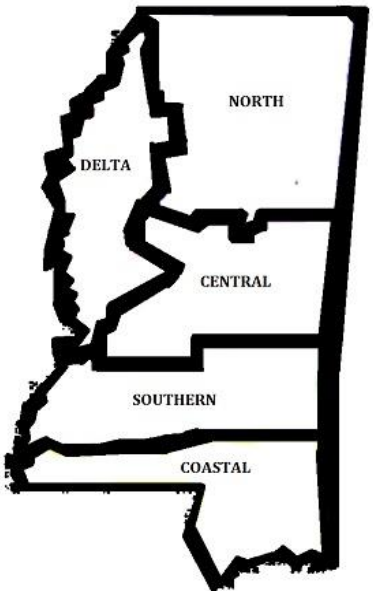

Figure 12. Regional map of Mississippi

The study attempted to have an equal number of informants from each region; however, the outcome of such an attempt was unknown. Urbanized areas, for instance, typically have a larger populations of d/Deaf people than rural areas, as they offer more communicative accommodations (i.e. video phone service and ASL/English interpreters) and job opportunities. It was estimated that metropolitan areas such as Jackson, Tupelo, Hattiesburg, and Gulfport would have a more diverse range of informants than rural areas such as Clarksdale or Greenville. It was the investigator's goal to obtain five interviews from each of the five geographic regions, resulting in 25 interviews. Interviews were successfully conducted in four out of the five regions: North, Delta, Central, and Coastal. There were no informants for the Southern region of the state, and only two people in the Coastal region were willing to participate in the study. Overall, this study analyzed the language use of 17 Deaf informants throughout the state.

It was anticipated that each region would yield lexical and phonological variants to certain lexical items that would reflect its geographical location, and possible influences from nearby

communities. For instance, informants in the coastal region may have had variants specific to their geographical location near the Gulf of Mexico, and possible influences from New Orleans. Informants from the Delta, on the other hand, were in more rural areas, and could have had responses that suggested little to no contact with d/Deaf people outside their immediate community. Informants in the North may have had influences from Memphis and other cities in Tennessee. Since Tennessee and Louisiana are not included in this study, it was assumed that any significant phonological or lexical variants in the regions near these states that were not seen in other parts of the state may suggest outlying regional influence.

F. Ethnicity

It was also a goal to have the informants represent the ethnic makeup of the given region. Unfortunately, the size of the population and willingness to participate in the study did not yield a true representation of the ethnic diversity. There were five African American informants: four came from the Delta, and one came from the North. The remaining 12 informants were Caucasian, and there were no Native American informants.

G. Gender

A total of 11 women and 6 men participated in this study (see Table 1). Since the population of the Deaf community is relatively small, the goal of the study was to interview as many people as possible from as many different backgrounds as possible.

Region	Women	Men
North	4	1
Delta	2	3
Central	3	2
Coastal	2	0

Table 1. Males and females in each region

The 2013 Mississippi Census yielded a higher percentage of women than men. The difference was marginal. The average percentage of women in the state was 52 percent. This study attempted to interview three women and two men in each of the regions. The lack of participation in the study did not yield a gender ratio representative of all geographic locations.

H. Education

Since primary and secondary education for d/Deaf people was dependent on parental discretion, the hearing status of informants' parents, as well as type of school—either mainstream or residential deaf—was an external factor that was considered. Those who attended mainstream schools were often one of very few d/Deaf students enrolled. Deaf students were placed either in special education classrooms or classrooms with sign language interpreting services, where the interpreter and/or the teacher were the only language models. Teachers and interpreters in educational settings often employ signed English codes rather than ASL as a teaching strategy to learn English, rather than fill a communicative need. Further, deaf students' exposure to visual communication is often limited to school. At home, they are rarely included in dialogue with their parents and siblings. It is not until college or adulthood that students in these environments gain exposure to other d/Deaf people, where they are able to learn ASL.

I. Data Maintenance

Once collected, the data was stored in a password-protected USB file, and on a personal computer that was also password protected. Following the Table of Informants from LAMSAS (Kretzschmar, 1994, pp. 24-27), informant demographics information were coded and placed in a password-protected Excel file. Each informant received a serial number, community letter, generation code, sex code, education code, occupation code, and race. The serial number was a unique number assigned to each informant. Each of the five regions was given a community letter that identified the region of the informant as follows: (A) North; (B) Delta; (C) Central; (D) Southern; (E) Coastal. The informant ID was a number used to identify the number of informants from a specific region. The generation code was based on informant age, which was placed in the following four categories: (1) 18-33; (2) 34-49; (3) 50-64; (4) 65-over. The Sex code classified the sex of each informant as M for male and F for female. Education was classified according to the type of education (mainstream or deaf residential) received, and was noted as M for mainstream, and DR for deaf residential. Students who attended any schools specializing in the oral approach were categorized as mainstream, since the language of instruction was not a manually-based language. The occupation code was classified as: (B) blue-collar/vocational, (W) white-collar/professional, (D) disabled, or (R) retired. Race was classified according to the race of each informant as: 1 = African American; 2 = Hispanic; 3 = Native American; and 4 = Caucasian. See Figure 13 for an example of an informant code.

Informant: 5E3MDW1

Figure 13. Example of Informant number. '5' represents the serial number; 'E' is the community letter, indicating the informant is from the Coastal region; '3' is the informant ID, showing this informant is the third person to be interviewed in this region; '3' is the generation code, indicating this informant is between 50-64 years of age; 'M' is the sex code, signifying the informant to be male; 'D' is the education code, which means the informant attended a school for the deaf; 'W' is the occupation code, showing the informant has a professional job, and '1' is the race code, indicating the informant to be African American.

Once collected, the recorded data was analyzed and notated through ELAN, a free computer software program popular among researchers of signed languages. Analysis consisted of phonological and lexical variation in the target item portions of the interviews. In ELAN, the interviews were noted using five tiers: Target Item, Gloss, Citation Form, Initialized Signs, and Handedness. The Target Item tier contained the lexical items that were presented to the informants in the Power Point slides. The Gloss tier contained the variant of each target item produced by the informant. In ASL, a *gloss* is the English equivalent for a sign. The Citation Form tier distinguished whether or not the signs produced were used in The Gallaudet Dictionary of American Sign Language, which was used as a base for lexical analysis. Three signs, however, were not included in the dictionary: *crawfish, biscuit,* and *catfish*. It was assumed these lexical items are region-specific and may not be used as often in non-southern regions. The Initialized Signs tier was noted if a sign was initialized, that is, if the handshape parameter was in the shape of the letter the sign represented (i.e. CHRISTMAS is made with a C-hand). Lastly, the Handedness tier was noted if a sign was made with one or two hands. Only signs that could be produced with either one or two hands without changing the meaning of the signs were documented. For instance, GRANDMOTHER and GRANDFATHER can be produced with either one or two hands, but YESTERDAY can only be produced with one hand. Once all the interviews were complete, they were noted in a series of Excel sheets according to social factors. Frequency counts were taken within each social category that showed how many informants produced a given variant of an item. This was done to determine if there were any correlations between the signs produced and social variables.

CHAPTER IV
EXPLANATION OF TARGET ITEMS

A. Variation

Like spoken languages, signed languages contain variation influenced by internal constraints and external constraints. Internal constraints are variants that are influenced by the language itself and are alternatives for saying or signing the same thing, and external constraints are variants whose influences lie within the social characteristics of the language's users. Lucas et al. (2003, p. 17) states that there is a relationship between linguistic and social variables, saying, "these [linguistic] alternatives may correlate with the social characteristics of the signer of speaker, in which case we talk about *sociolinguistic variables*." The objectives of this study were to determine what linguistic variation was present in Mississippi, how it was manifested, and what social factors were possible influences. The data obtained yielded both phonological and lexical variation.

Phonological variation affects the basic parts of the sign without affecting its meaning. Differences can be seen in one of the five sign parameters: handshape, sign location, movement of the sign, orientation of the palm, or non-manual markers. For example, the ASL sign for MONDAY is produced with the initialized M with the palm facing inward, moving in a circular motion. An example of phonological variation in American English would be the different between saying *tomato* with the open, mid-front vowel [e], or the open back vowel [ɑ]. Phonological variation can be influenced both internally and externally. Internally, variation can be influenced by the signs that precede or follow a particular sign. It can also be influenced by any one of the

five sign parameters. Phonological variation also includes handedness, i.e. whether the sign is produced with two hands or one hand. Over time, many signs that were traditionally produced with two hands are now produced with one. Lastly, phonological variation includes whether or not a sign is initialized, that is, if the sign is produced with the handshape of one of the letters from the manual alphabet. Certain signs were initialized in the 1960s and 1970s as a method of teaching English to deaf children. Many of the initialized signs have been lexicalized and are now recognized as legitimate ASL signs. For example, the sign for YESTERDAY is traditionally produced two ways: the thumb of the A-hand touches the corner of the mouth and then the temple, or the thumb of the Y-hand can perform the movement. The difference in the sign is in handshape, where one sign represents the letter *y* in English spelling for *yesterday* (see Figures 14 & 15).

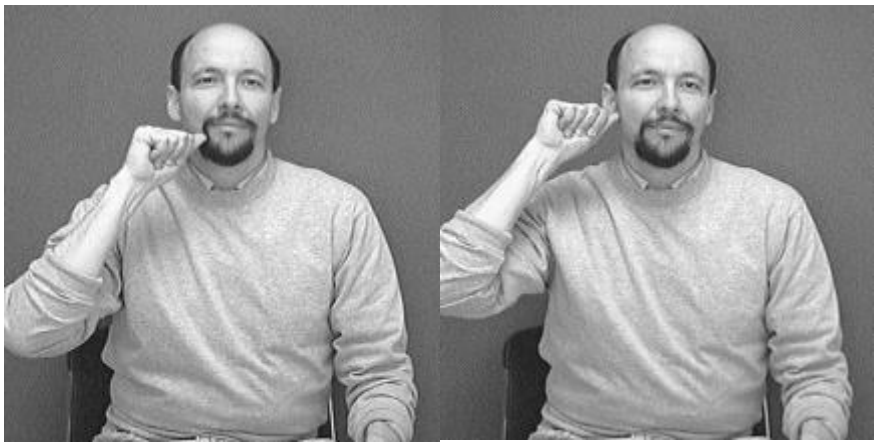

Figure 14. Citation form for YESTERDAY

Figure 15. Initialized sign for YESTERDAY

Lexical variation occurs when the whole sign is changed but still maintains its meaning. For example, the ASL sign for BIRTHDAY can be signed by touching the middle finger of the dominant to the chin and then to the chest, or can be signed by tugging the ear with the thumb and index finger of the dominant hand.

Many of the social elements that historically contributed to variation in American English also contributed to variation in ASL. Access to other deaf people and to ASL have been of the primary contributors for variation in ASL. The Deaf community in the United States is relatively small and, before the advent of deaf-friendly technology, contact with deaf people outside of one's immediate region was limited. Unless a person traveled outside his/her immediate area, access to ASL was confined to a person's geographical area. Like American English, ASL contains regional variation, and is representative of a person's communities of practice.

Age is another social factor that influences variation. Historically, deaf people were isolated in residential schools for the deaf. Educational practices in deaf schools experienced dramatic change through the late 19th and mid-20th centuries. Bilingual education was replaced with oral approaches, and sign language was discouraged. In the 1960s when it started being used again, remedial approaches for teaching deaf students were developed, which resulted in systems of

Manually Coded English. Because of this, approaches to deaf education are influencers of signed language variation.

ASL also varies according to ethnicity, even within the geographic boundaries of a country or in smaller regions such as a state. Like all public institutes of education, deaf schools were ethnically segregated until the 1960s. African American deaf people had even less communicative access than white deaf people. Their language use reflected their cultural, social, and educational needs. A lack of social contact with people outside their ethnicity lead to consistently used linguistic features that made ASL used among African American deaf people unique in its own right, thus establishing an African American variation of ASL called *Black ASL*. Some of these features include the pervasive use of older signs, a larger signing space, and producing a sign with two hands instead of one (McCaskill et al., 2011, pp. 161-166). As with all living languages, ASL has evolved to meet the needs of its users. Lexical items may change or be replaced with new ones, and can do so in a relatively short period of time. This is called *historical evolution*. A person may, however, choose to use the signs s/he grew up using. As a result, a person's age is a contributing social element in which language variation can be seen.

Parental auditory status and education type and level are two social factors that are intertwined. A parent's hearing status is a very influential factor in determining where a deaf child will go to school. Many Deaf adults with Deaf children typically send their deaf child(ren) to a school for the deaf. Deaf schools have historically been the cultural crux in the Deaf community, and attending a deaf school is considered a vital element within the Deaf community in order to expand one's cultural knowledge and truly appreciate one's cultural heritage. Parents who are not deaf usually do not have prior knowledge of the educational options and routes for their deaf children, and often send them to local mainstream schools.

In order to highlight the types of variation found in ASL, this study used three semantic categories for analysis: kinship terms, animal signs, and signs for countries and regions. In all, a total of 31 signs were analyzed from each of the 17 informants (see Table 2 for the lexical items in each category). The lexical targets were coded based on the variant produced, initialization, and handedness. The Gallaudet Dictionary of American Sign Language provided the base by which citation forms of sign variants were established. If the dictionary had more than one variant, the first variant was used as the citation form. Variants of each sign were numerically labeled in order to distinguish between each variant, and to determine the number of variants for each target item. Variants could differ either phonologically or lexically. The data is presented according to social category, and is further divided into target items whose differences are phonological, and those that are lexical.

Kinship Terms	**Animal Terms**	**Countries/Region Terms**
Mother	Fish	Japan
Brother	Catfish	China
Father	Shrimp	Mexico
Sister	Cow	Italy
Parents	Deer	Germany
Grandmother	Goat	Coast
Grandfather	Chicken	Beach
Stepmother	Cat	Mississippi
Stepfather	Crawfish	Delta
Aunt	Dog	
Uncle	Rabbit	

Table 2. Semantic categories and their respective lexical items

B. Initialized Lexical Targets

Since the Deaf community in Mississippi is relatively small, many Deaf people are initially taught the basics of visual communication by hearing people. As previously mentioned, one of the

educational approaches developed for Deaf Education consisted of the development of Manually Coded English signing systems, which are systems of signs employed to represent spoken English. Many of these signs were produced with handshapes from the ASL alphabet, which were used to represent the first letter of the English word the sign was meant to represent. These systems were created in an attempt to teach English to d/Deaf people.

Initialized Target Items	Target Item Gloss
Rabbit	*Rabbit1, 2, or 3*
Parents	*Parents1*
Japan	*Japan2*
China	*China2*
Italy	*Italy1*

Table 3. Initialized lexical targets

Many of the signs now used in ASL were incorporated from systems of Manually Coded English through a process known as lexicalization. As a result, several of the lexical targets and their variants obtained in this study were initialized (see Table 3).

C. Two-Handed Lexical Targets

One of the elements for analysis was to determine the number of articulators used to produce a lexical item, that is, how many hands were used to produce a particular sign. The data collected yielded several signs that can be articulated with either one or two hands without affecting meaning (see Table 4).

Target Items	Target Item Gloss
Shrimp	*Shrimp 1 or 2*
Cow	*Cow1*
Deer	*Deer1 or 2*
Cat	*Cat1, 2, 3, or 4*
Crawfish	*Crawfish 1 or 4*
Grandmother	*Grandmother1*
Grandfather	*Grandfather1*
Japan	*Japan2 or 3*
China	*China 2 or 3*

Table 4. Lexical targets that can be signed with either one or two hands

Since ASL was partially derived from *la langue des signes française*, or LSF, many of the lexical items still utilized are produced with two hand as they were in LSF. Some items, however, have been reduced to one hand. Lucas & Bayley (2001) state, "Research in ASL has shown that signers in different regions tend to favor different variants. For example, in Boston signers tend to favor the one-handed variant of signs that are traditionally produced with two hands, like DEER or WANT," (p. 678). While geographic location is noted to be a factor that contributes to linguistic variation, other social factors such as age and ethnicity cannot be disregarded.

D. Kinship Terms

Kinship lexical targets have been fairly consistent throughout the existence of ASL. The signer's head is used as a gender marker, where signs identifying men are produced on the upper portion of the head and signs identifying women are produced on the lower half of the head. For example, the sign for BOY is produced by grabbing the brim of an imaginary baseball hat. The sign for GIRL is produced by sliding the thumb down the jawline, representing the strings on a girl's bonnet. Signs such as GRANDMOTHER and GRANDFATHER were traditionally produced with two hands, whereas now they can be produced with one hand.

1. *Mother & Father*

Figure 16. ASL sign for MOTHER

Figure 17. ASL sign for FATHER

The sign for MOTHER is produced by placing the thumb of your hand against your chin. The hand should be an open 5-hand (see Figure 16). The sign for FATHER is the same as mother, with the exception of the sign's location. It is produced on the head instead of the chin (see Figure 17). This study did not yield any phonological or lexical variation for either of the signs.

2. *Brother*

The sign for BROTHER has traditionally been produced by compounding the sign for BOY and either the sign for RIGHT or ALSO/SAME (see Figure 18). However, the sign has been phonologically shortened in a variety of ways to suit the needs of the signer. The sign following the sign for BOY may influence the way BOY is signed, resulting in a different handshape. The citation form of the sign in The Gallaudet Dictionary of American Sign Language is composed of an L-shaped hand at the top of the head, moving into the sign for RIGHT/CORRECT (see Figure 19).

Figure 18. The traditional ASL sign for BROTHER (see Brother6 in the description chart below). The first sign is the sign for BOY, and the following sign is the sign for ALSO/SAME.

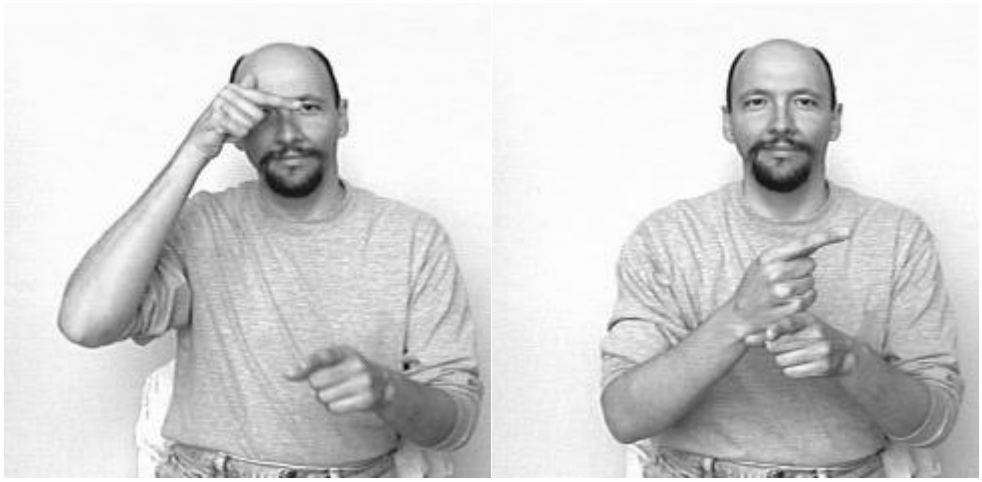

Figure 19. Citation form (Brother1) for BROTHER as listed in <u>The Gallaudet Dictionary of American Sign Language</u>

Figure 20. Brother5 variant of the ASL sign for BROTHER, combining the sign for BOY and RIGHT/CORRECT.

Variation	Description
Brother1	L-shaped hand starting at the forehead and transitioning into the sign for RIGHT/CORRECT
Brother2	1-shaped hand starting at the forehead and transitioning into the sign for RIGHT/CORRECT
Brother3	A-shaped handshape starting at the forehead and transitioning into the sign for SAME/ALSO.
Brother4	A-shaped handshape starting at the forehead and transitioning into the sign for RIGHT/CORRECT
Brother5	Compounds signs for BOY + RIGHT
Brother6	Compounds signs for BOY + SAME
Brother7	1-shaped hand starting at the forehead and transitioning into the sign for SAME/ALSO.

Table 5: Variations of the lexical item BROTHER and their corresponding descriptions

Another variation of the sign combines the sign for BOY and RIGHT/CORRECT (see Figure 20). This study observed seven phonological variations, which were a combination of the signs shown in the figures above. Listed are descriptions of each of the seven variations (see Table 5).

3. Sister

There were also several variations for the lexical item SISTER. Historically, the sign for SISTER combined the signs for GIRL and RIGHT/CORRECT. Since the index finger is extended in the sign for RIGHT, but not in the sign for GIRL, the index finger is often assimilated into the GIRL sign, resembling an L-shaped hand. All the variants of SISTER observed in this study consisted of phonological variations in the initial portion of the sign.

Figure 21. Citation form for SISTER (see Sister1 in Table 6)

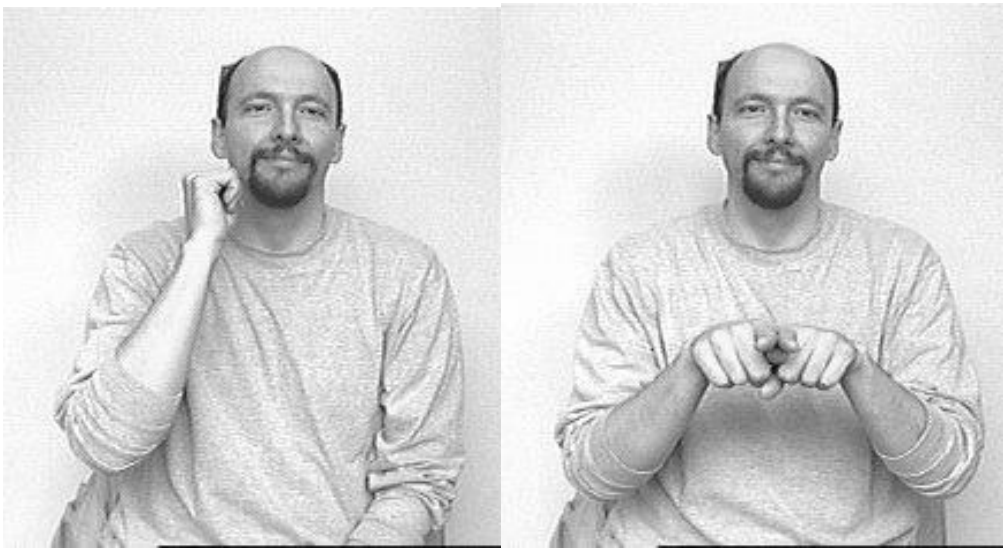

Figure 22. Variant of SISTER (see Sister5 in Table 6)

Variation	**Description**
Sister1	L-shaped hand starting on the side of the face transitioning into the sign for RIGHT/CORRECT
Sister2	Combination of the signs for GIRL + RIGHT
Sister3	1-shaped hand starting on the side of the face transitioning into the sign for RIGHT/CORRECT
Sister4	1-shaped hand starting on the side of the face transitioning into the sign for ALSO/SAME
Sister5	Combination of the signs for GIRL + ALSO/SAME

Table 6. Variants of SISTER and corresponding descriptions

4. *Parents*

The sign for PARENTS is a combination of MOTHER and FATHER signed quickly so it appears to be one sign. It can be produced as MOTHER+FATHER or FATHER+MOTHER. This sign can also be initialized with the manual letter "P" (see Figures 16 and 17 above).

5. *Grandmother and Grandfather*

Figure 23. ASL sign for GRANDMOTHER

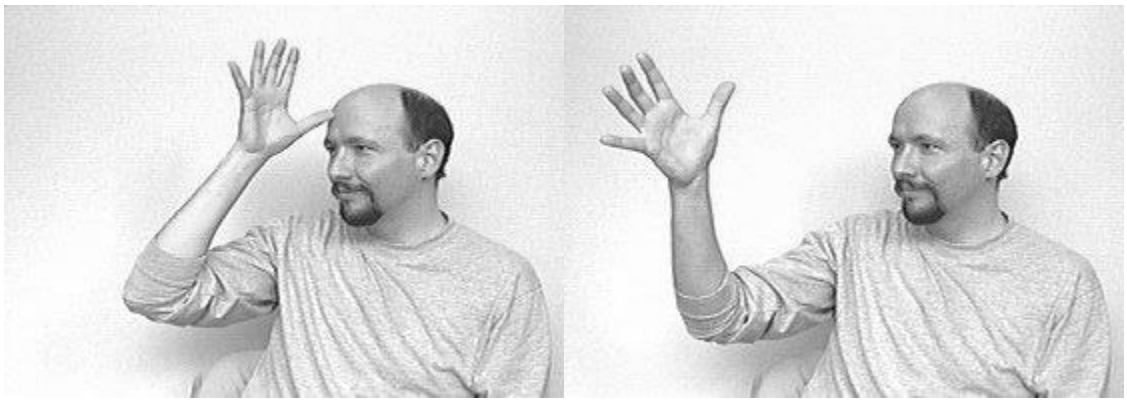

Figure 24. ASL sign for GRANDFATHER

The signs for GRANDMOTHER and GRANDFATHER (see Figures 23 and 24 above) are similar to the signs for MOTHER and FATHER, with the exception that the 5-hand moves out away from its starting position, which serves to show as a generational gap. The older version of the signs were produced with two hands, with the thumb of the second open 5-hand touching the side of the first hand, however, can be produced with only one hand.

6. Stepmother

Variation	**Description**
Stepmother1	L-shaped hand is twisted inward outward, away from the body, and is compounded with the sign for MOTHER
Stepmother2	This is a shortened version of *Stepmother1* in which the sign for MOTHER is omitted and the first part of the sign is moved closer to the chin
Stepmother3	Combination of the signs STAMP+MOTHER

Table 7. Variants of STEPMOTHER with corresponding descriptions

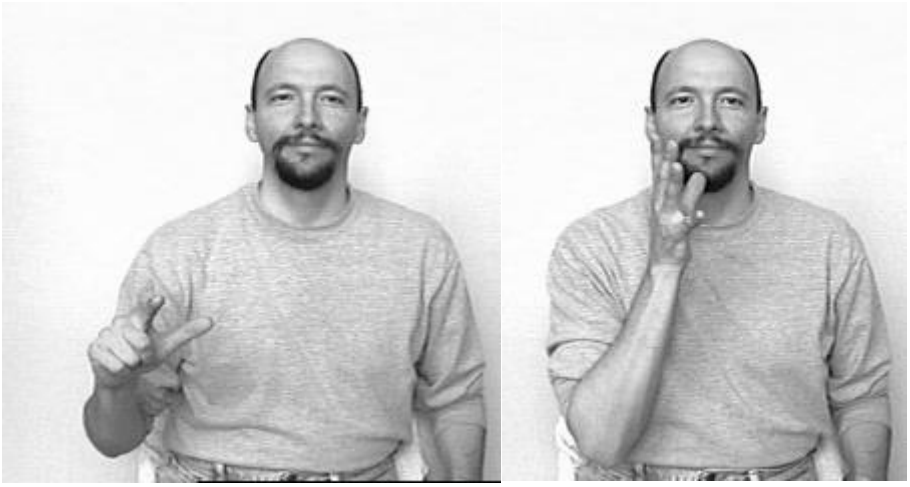

Figure 25. ASL sign for STEPMOTHER

The sign for STEPMOTHER is produced by twisting the dominant L-shaped had outwards, which is followed by the sign for MOTHER (see Figure 25). This sign can also be shortened by eliminating the sign for mother, and moving the first part of the sign closer to the chin. Other variations of the sign include finger spelling S-T-E-P and signing MOTHER.

7. Stepfather

The signs for STEPFATHER are produced the same as STEPMOTHER, but with MOTHER being replaced with FATHER. The sign for STEPFATHER can also be shortened by eliminating the sign for FATHER, and producing the L-shaped around the forehead, twisting the palm outward.

Variation	**Description**
Stepfather1	L-shaped hand is twisted outward, and is compounded with the sign for FATHER
Stepfather2	This is a shortened version of *Stepfather1* in which the sign for FATHER is omitted
Stepfather3	Combination of the signs STAMP + FATHER

Table 8. Variants of STEPFATHER with corresponding descriptions

Figure 26. ASL sign for STEPFATHER

8. Aunt

The sign for AUNT is produced by shaking the A-shaped hand near the lower half of the cheek. Signs pertaining to females were produced on the lower half of the face, while signs pertaining to men were signed on the upper half of the face. The second variant, *Aunt2*, was produced by moving the A-shaped hands up and down against both sides of the chest. A similar sign was produced for a variant of UNCLE which used the initial –u instead of –a.

Variation	**Description**
Aunt1	The A-handshape is shaken inward near the side of the face
Aunt2	Is the same sign for ACT/THEATER

Table 9. Variants of AUNT with corresponding descriptions

Figure 27: ASL sign for AUNT

Figure 28: Variant of AUNT (see Aunt2 in Table 9)

9. Uncle

The sign for UNCLE is produced by shaking the U-shaped hand near the temple. Two informants in this study produced a sign by initializing the sign for ACT/THEATER with a U-

shaped hand. This sign was similar to the second variant for AUNT, and was not produced by other informants.

Variation	Description
Uncle1	The U-handshape is shaken near the side of the head
Uncle2	The sign for ACT/THEATER, but initialized with the letter U

Table 10. Variants of UNCLE with corresponding descriptions

Figure 29. ASL sign for UNCLE

E. Animal Terms

1. Fish

The sign for fish is produced by the hand mimicking the tail of a fish, and moving either forward, backward, or remaining stationary. These variants are examples of phonological variation in which a single parameter of a sign is altered without changing the meaning of the word.

Figure 30. ASL sign for FISH (see Fish2 in Table 11)

Variation	Description
Fish1	Shaking B-hand, mimicking a fish tail, moving towards the body
Fish2	Shaking B-hand, mimicking a fish tail, moving away from the body
Fish3	Shaking B-hand, mimicking a fish tail, in a stationary location

Table 11. Variants of FISH with corresponding descriptions

2. Catfish

The sign for CATFISH is produced by combining the signs for CAT and FISH. This study yielded four variants, two of which contained phonological variants of the sign for CAT (see *Catfish1* and *Catfish3* in Table 12).

Variation	Description
Catfish1	The combination of CAT and FISH
Catfish2	The sign for FISH (any of the three aforementioned variants for FISH)
Catfish3	The combination of WHISKER and FISH
Catfish4	The sign for SHARK

Table 12. Variants of CATFISH with corresponding descriptions

3. Shrimp

There was no sign for SHRIMP in The Gallaudet Dictionary of American Sign Language. The sign was produced by bending the index finger repeatedly and moving the hand across the body to mimic the movement of a shrimp's tail.

Figure 31. ASL sign for SHRIMP

Like the variants for FISH, two of the listed variants were phonological and different in movement. The other variant produced resembled one of the variants for CRAWFISH (see Table 13 for a description of variations)

Variation	Description
Shrimp1	The index finger is crooked, mimicking a shrimp tail, moving across the body
Shrimp2	The index finger is crooked, mimicking a shrimp tail, moving away from the body
Shrimp3	The index finger and middle finger of both hands are used to mimic pinschers, which is also one of the variants for CRAWFISH

Table 13. Variants of SHRIMP with corresponding descriptions

4. *Cow*

Figure 32. ASL sign for COW

The sign for COW (see Figure 30) is produced by putting the thumb of the Y-hand on the temple. This sign can be produced either with one or two hands. Unlike the variant *Deer2* for DEER (see Table 12 below), this sign was only produced at the head and did not extend outward to indicate the length of horns. Also, there were no signs that distinguished a bull from a cow.

5. Deer

This sign was also not included in the ASL dictionary used in this study. The sign for DEER is produced by putting the thumb of the hand on the temple. The extended fingers represent the antlers of a deer's rack. This sign can be produced with one or two hands, but is more commonly produced with two hands. A variant of this sign starts out with the thumbs touching the temples resembling antlers, then moves outward as if to make the rack of antlers look bigger.

Figure 33. ASL sign for DEER (note this sign can be produced with either one or two hands)

Variation	**Description**
Deer1	Thumb of the 5-hand on the temple; can be produced with one or two hands
Deer2	5-hand(s) start at the temple and extends outward to indicate a large antler rack

Table 14. Variants of DEER with corresponding descriptions

6. Goat

The signs for GOAT are produced to depict the facial features of a goat. There are several phonological variants of this sign. The one found in The Gallaudet Dictionary of American Sign

Language is produced with the S-shaped hands touching the chin, and moving upwards across the face, transitioning to the V-shaped hand on the forehead, which resembles a goat's horns. Another variant of this sign is produced by forming an –s and a –v on the chin and again on the forehead. It is plausible to suggest that a possible influence on the phonological variants for this lexical target are the physical features of various goat breeds, as there are several breeds of domesticated goats found in Mississippi. It is also possible this lexical item is not used often, which would certainly account for the wide array of variants.

Figure 34. ASL sign for GOAT (see Goat5 in Table 15)

Variation	**Description**
Goat1	S-hand starts on chin, and moves upward into a V-shaped hand on the forehead
Goat2	Produced by making an S and V on both the chin and the forehead
Goat3	S-hand starts on nose and moves upward into a V-shaped hand on the forehead
Goat4	V-hand touches the chin, nose, and forehead
Goat5	Bent V-hand touches the chin and forehead
Goat6	Produced by making an S and V on the chin, nose, and forehead

Table 15. Variants for GOAT and corresponding descriptions

7. Chicken

The sign for CHICKEN is produced by using the thumb and index finger to depict a chicken beak. The sign is produced at the mouth. One variant of this sign moves the sign from the mouth to the palm of the other hand, mimicking a chicken pecking the ground. The sign for ROOSTER is formed by placing the thumb of the 3-shaped hand on the forehead, depicting the rooster's comb. If, for some reason, the sex of a bird is not known, the sign for CHICKEN is used.

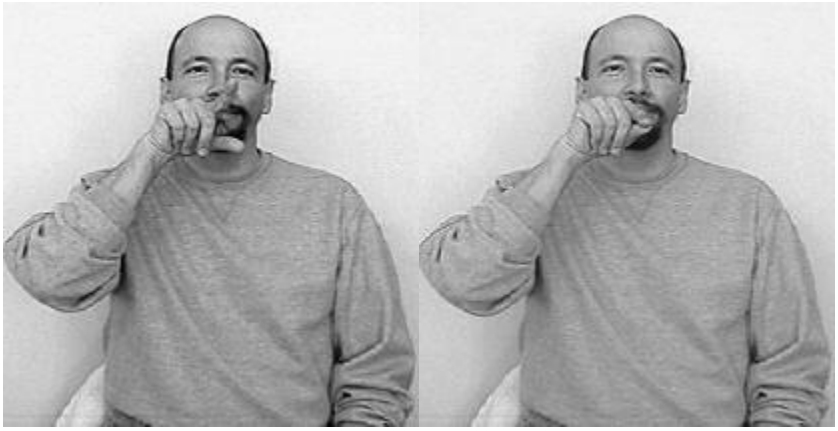

Figure 35. ASL sign for CHICKEN (see Chicken1 in Table 16)

Variation	**Description**
Chicken1	Index finger and thumb form beak and move from mouth to open hand
Chicken2	Index finger and thumb form beak and "peck" the open non-dominant hand
Chicken3	Index finger and thumb form a beak at the mouth
Chicken4	The thumb of the 3-hand is on either the chin or the forehead
Chicken5	A combination of ROOSER (see *Chicken 4*) and WINGS

Table 16. Variants of CHICKEN with corresponding descriptions

Figure 36: Chicken2 variants (see Table 16 for description)

8. Cat

Variants for CAT were produced by using classifiers, which are handshapes that resemble an object or feature, resembling a cat's whiskers. The sign can be produced with the thumb and index finger, which resembles a single whisker, a claw shaped hand representing multiple whiskers, or a flat-O hand. All the variants are produced in the same location. This is another example of phonological variation in which a parameter of a sign is changed but does not affect the meaning of the sign.

Figure 37. ASL sign for CAT (see Cat1 in Table 17)

Variation	Description
Cat1	The thumb and index finger of open hand touch near the nose, indicating whiskers
Cat2	The 5-hand is facing inward near the nose, and lightly scratches the check, indicating whiskers
Cat3	The tips of the "flat-O" lightly brush the cheek, indicating whiskers
Cat4	The thumb and middle finger of open hand touch near the nose, indicating whiskers

Table 17. Variants for CAT with corresponding descriptions

9. Crawfish

The sign for CRAWFISH was another sign not found in the sign language dictionary. The sign that represented the citation form was the one used the most frequently in this study (see Figure 38). It was produced with the index and middle fingers closing and opening, resembling a crawfish's pincers. The study yielded five lexical and phonological variations of this sign.

Figure 38. ASL sign for CRAWFISH (see Crawfish1 in Table 18)

Variation	Description
Crawfish1	Index finger and middle finger form V's and look like pinschers
Crawfish2	The small finger is extended and moves inward as the hand moves across to the non-dominant side of the body, mimicking a crawfish tail
Crawfish3	Same as *Crawfish2*, but with the hand moving across to the dominant side of the body
Crawfish4	Thumb and index finger touch to form pinschers
Crawfish5	V-hand is sideways and moves across body

Table 18. Variants of CRAWFISH with corresponding descriptions

10. Dog

The sign for DOG is produced by the signer slapping the side of her/his leg and snapping her/his fingers as if to call a dog. The first part of the sign can also be deleted in which the signer only snaps her/his fingers without slapping the side of the leg.

Figure 39. Citation form for DOG (see Dog1 in Table 19)

Variation	Description
Dog1	Snapping fingers
Dog2	Slapping hip and snapping fingers

Table 19. Variants of DOG with corresponding descriptions

11. Rabbit

Variants for RABBIT were composed of classifiers that represented rabbit ears. Signs were produced near the chest or near the temple. Traditionally the sign was produced at the head (see Figure 38), but has experienced lowering (see Figure 37). Other lexical items, such the as the sign for KNOW, have also been noted for lowering. In their study of Black ASL, McCaskill et al. (2011, p. 88) noted over 53 percent of the participants favored the lowered variant. This study yielded five variations of this lexical target. One variant was the traditional sign for RABBIT and was produced at the head. Three variants were lowered and produced in front of the signer, and one variant was produced which depicted a rabbit's two front teeth.

Figure 40. Citation form for RABBIT (see Rabbit1 in Table 20)

Figure 41. Rabbit3 (see Table 20 for description)

Variation	Description
Rabbit1	Palms facing each other; U-hands make ears
Rabbit2	Palms face inward; U-hands make ears
Rabbit3	Palms face inward; U-hands on either side of head forming ears
Rabbit4	Hands touch shoulders and then forms *Rabbit1*
Rabbit5	Show two front teeth, mimicking a rabbit's teeth

Table 20. Variants for RABBIT and corresponding descriptions

F. Countries/Location Terms

Signs for countries and locations have recently changed in the United States to be more culturally sensitive and appropriate. Historically, many country signs resembled physical features of a country's inhabitants, or represented a popular political or nationalistic symbol. For example, the traditional sign for CHINA was a C-shaped hand or index finger pulling at the corner of the eyelid to resemble East Asian eye features. In the past ten years, the sign has slowly been replaced with a more appropriate sign. Now, the sign is produced by touching each shoulder, starting with the non-dominant side, and the lower part of the shirt, which resembles the buttons on a traditional Chinese shirt or dress. Likewise, the traditional sign for GERMANY represented the small spear on a soldier's helmet. Now, the sign resembles the German Empirical Eagle.

1. *Japan*

The sign for JAPAN (see Figure 41) that has been adopted uses the index fingers and thumbs to outline the shape of the island of Japan. The traditional signs highlight the eye features of Japanese people. The older forms of JAPAN can be produced either with the index finger or the pinky finger, which represents the –J in ASL. The older forms of the lexical item can be produced with one or two hands.

Figure 42: ASL sign for JAPAN (see Japan1 in Table 20)

Figure 43: Japan3 (see Table 20 below)

Figure 44: Japan2 (see Table 20 below)

Variation	**Description**
Japan1	Index fingers and thumbs of both hands touch and form outline of the island of Japan
Japan2	Pinky fingers pull upwards on the corners of the eyes. This can be produced with one or two hands
Japan3	The index finger(s) pull upwards on the corners of the eyes, This can be produced with one or two hands

Table 20. Variants for JAPAN and corresponding descriptions

2. China

The signs for CHINA are similar to the signs used for JAPAN. Traditionally, the signs utilized the eye features of Chinese people, and were produced either by pulling at the corner of the eye with the index finger or the C-shaped hand (see Figures 44 & 45 below). The more culturally appropriate sign that has recently been adopted depicts the buttons on a Chinese shirt or dress (see Figure 44).

Figure 45: Citation form for CHINA

Figure 46. Initialized sign for CHINA

Figure 47. China3 (see Table 21)

Variation	**Description**
China1	The index finger touches the non-dominant side of the chest, moves to the dominant side of the chest, and then touches the lower corner of the stomach, indicating the buttons on a Chinese shirt or dress
China2	Thumb(s) of C-hands pull upwards on the corners of the eyes. This can be produced with one or two hands
China3	The index finger(s) pull upwards on the corners of the eyes. This can be produced with one or two hands

Table 21. Variants for CHINA and corresponding descriptions

3. Mexico

The variants observed for MEXICO are lexically different. Each sign has its own set of phonological parameters that completely changes the production of the sign. The more culturally appropriate variant is signed near the forehead (see Figure 47) with the index finger and middle finger extended. One of the older variants for Mexico is also the sign for SPAIN (see Figure 48), and is depicted by the signer "hooking" a matador's cape. The variant that is not considered culturally appropriate is *Mexico3*, and is produced by rubbing the fingertips of the M-shaped hand near the mouth, which is meant to depict the stereotypical mustache worn by Mexican men (see Table 22 for description).

Figure 48. Citation form for MEXICO

Figure 49. ASL sign for SPAIN (also used to sign MEXICO; see Mexico2 in Table 22)

Variation	Description
Mexico1	The V-hand is pointed towards the eyes and moves outward and inward
Mexico2	This is also the sign for SPAIN. The dominant X-hand starts at the shoulder and meets the non-dominant X-hand at the center of the body, indicating the clasp on a matador's cape
Mexico3	The tips of the M-hand fingers brush the side of the mouth in a downward motion.

Table 22. Variants for MEXICO with corresponding descriptions

4. Italy

One of the signs used for ITALY has an interesting history that adds to the sign's meaning. The sign is produced by making a cross on the forehead with the initial –I (see Figure 48). The first association many non-native signers make with this is the affiliation Italy has to the Roman Catholic faith. Interestingly, this sign is also the sign for PEPSI, because it resembles the original Pepsi Cola logo. The recent and more culturally appropriate sign for ITALY is produced by outlining the shape of the country (see Figure 49).

Figure 50. Traditional sign for ITALY

Variation	Description
Italy1	The I-hand forms a cross on the forehead
Italy2	The thumb and index finger move downward and outline the shape of the country

Table 23. Variants for ITALY with corresponding descriptions

Figure 51. Newer sign for ITALY (see Italy2 in Table 22 for description)

5. *Germany*

The variants for GERMANY both have political connotations. The sign that is most widely used today resembles the Imperial Eagle, while the older sign resembles the small spear on top of the old soldier helmet.

Figure 52: Older sign for GERMANY

Figure 53: Citation form of GERMANY

Variation	**Description**
Germany1	The two 5-hands intersect between the thumb and index finger, indicating the German Imperial Eagle
Germany2	The 1-hand is produced on the top portion of the forehead, indicating the spear on the old German helmet

Table 24. Variants of GERMANY with corresponding descriptions

6. *Coast*

There were three lexical variants for lexical target COAST. Each used classifiers to depict waves from the ocean making contact with the beach line. The signs for COAST that were observed in this study resembled the ocean's side, or depicted water crashing onto coastal rocks. There was no

sign found in Gallaudet's ASL dictionary. Interestingly, more people preferred to spell out the word rather than use a particular sign for it.

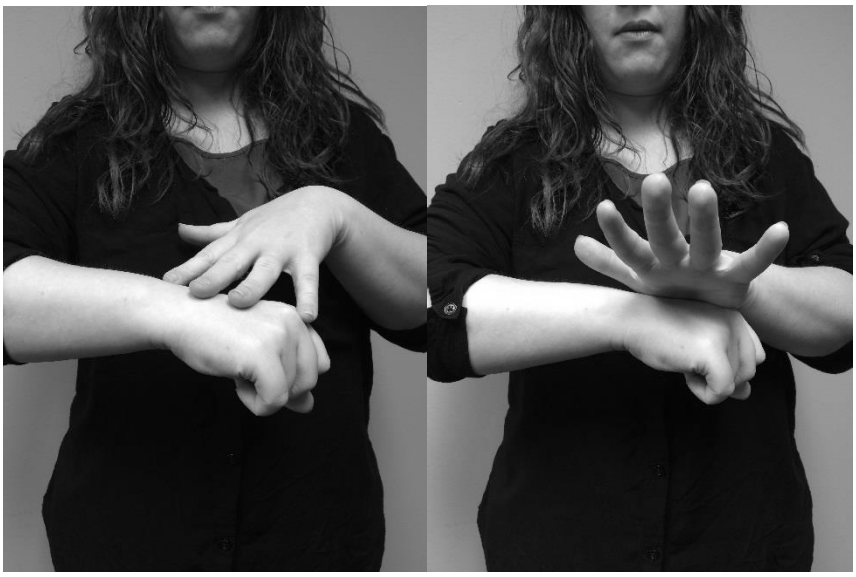

Figure 54. Citation form for COAST (see Coast1 in Table 24)

Variation	**Description**
Coast1	The palm of the dominant, open hand moves against the closed fist of the non-dominant hand, indicating water crashing on the coastline
Coast2	The two hands, with palms facing the floor touch, and the dominant hand moves across the body, outlining the beach
Coast3	Two O-hands move forward; this is also the English sign for OCEAN

Table 25. Variants of COAST with corresponding descriptions

7. Beach

The lexical target BEACH had several variants, and each resembled the beachline or the ocean making contact with land. Similarly, informants also preferred to spell out the word rather than use a sign.

Figure 55. Beach4 (see Table 25 below)

Figure 56. *Beach2* (see Table 25 below)

Variation	Description
Beach1	Open 5-hands, palms down, move up and down showing the beach line
Beach2	Open 5-hands, palms down, move away from the body in a wavy motion, indicating ocean waves
Beach3	The same as *Coast1*
Beach4	The dominant B-hand moves up the non-dominant arm, outlining the beach
Beach5	The signer mimics a hula dancer
Beach6	The palms of the two open 5-hands clash against each other, mimicking the water coming onto the beach
Beach7	The signer mimics a swimmer

Table 25. Variants of BEACH with corresponding descriptions

8. Mississippi

Signs for states usually follow state abbreviations (ex. MD for Maryland), but sometimes are assigned a particular sign. For instance, the sign for TEXAS draws a number 7 in the air with an X-shaped hand. The sign for NEW YORK is formed by moving the Y-shaped dominant hand in the palm of the non-dominant hand. Mississippi adheres to the first category, in that its sign follows the old abbreviation MISS. Interestingly, this study yielded two variants reported to be signed in other states. One Delta informant signed *Mississippi2* (see Table 26 for a description), stating she saw the sign in Alabama. She explained that it was a combination of the sign for MISS (ex. *I miss you*) followed by the letter –i.

Variation	Description
Mississippi1	M-I-S-S
Mississippi2	The index finger touches the chin, then moves away from the chin, twisting outward, becoming an -i. This is a combination of the sign for MISS and -i.
Mississippi3	The letter –m is signed on the chin, then becomes an -i
Mississippi4	Compounds the signs for MISS and WRONG

Table 26. Variants for MISSISSIPPI and their corresponding descriptions

9. *Delta*

There was no sign for the Delta. All the informants finger-spelled the word. The interviewer in the Delta asked informants why there was not a sign, and was told that there were no distinguishing elements that would prompt a sign to be created.

CHAPTER V
DATA

Informants were grouped based on the demographic information obtained in the first portion of the interview. Each informant was categorized according to regional location, age, ethnicity, socioeconomic status, and educational background. Frequency counts were taken based on the number of informants that used a particular variant of a sign.

A. Region

Informants were categorized according to the town in which they resided. They were coded based on geographic location. There were five regional categories: North, Delta, Central, and Coast. There were: five informants from the North, five from the Delta, five from Central, and two from the Coast.

1. Kinship

The majority of the informants, despite their regional location, produced the same sign for each of the lexical targets. Most of the variant were distinguished on a phonological level. The only signs that varied lexically were variants for AUNT and UNCLE. The variants produced by two of the informants, who were married, produced signs that other informants had never observed. The two lexical targets that produced the most variation were BROTHER and SISTER, whose variants differ phonologically. Out of the 17 informants, 11 used *Brother7* and *Sister4*. Both targets are

traditionally compound signs, compounding either BOY or GIRL with the sign for RIGHT or SAME/ALSO. Instead of articulating either BOY or GIRL in the initial part of the sign, informants began with the 1-shaped hand in the initial position and transitioned into the second part of the compound, which suggests phonological assimilation.

There were no variants for MOTHER or FATHER. The signs for GRANDMOTHER and GRANDFATHER were produced with either one or two hands, and will be discussed in the corresponding social category. Out of 17 informants, 11 used the citation form for STEPMOTHER, and 10 used the citation form for STEPFATHER. The citation forms are compounded signs consisting of an L-shaped hand twisting outward away from the body followed by the sign for either MOTHER or FATHER. Two informants signed *Stepmother2* and *Stepfather2*, which assimilates the compounded signs into one sign, produced by shaking an L-shaped hand near the chin or near the forehead.

Target Item	North	Delta	Central	Coast
Mother				
Mother1	5	5	5	2
Brother				
Brother1	0	0	0	1
Brother2	0	0	2	0
Brother3	0	1	0	0
Brother4	0	1	1	0
Brother5	0	0	0	0
Brother6	0	0	0	0
Brother7	5	3	2	1
Father				
Father1	5	5	5	2
Sister				
Sister1	1	0	1	1
Sister2	0	1	0	0
Sister3	0	0	0	0
Sister4	4	2	4	1
Sister5	0	2	0	0
Parents				
Parents1	5	5	5	2
Grandmother				
Grandmother1	5	5	5	2
Grandfather				
Grandfather1	5	5	5	2
Stepmother				
Stepmother1	5	3	2	1
Stepmother2	0	0	1	1
Stepmother3	0	1	0	0
Stepmother FS	0	1	1	0
Stepfather				
Stepfather1	5	3	2	0
Stepfather2	0	0	1	1
Stepfather3	0	1	0	0
Stepfather4	0	0	0	1
Stepfather FS	0	1	2	0
Aunt				
Aunt1	5	5	4	2
Aunt2	0	0	1	0
Uncle				
Uncle1	5	5	4	2
Uncle2	0	0	1	0

Table 27: Informant responses for kinship terms according to region

2. Countries and Regions

There was a diverse use of lexical variants for signs pertaining to countries and regions. The name signs produced countries yielded remarkable results. Out of the 17 informants, eight produced the citation form of JAPAN and nine produced the citation form of CHINA. The other informants produced older variants. All 17 informants produced the citation form of GERMANY, and 13 out of 17 informants produced the citation form of ITALY.

Variations for MEXICO yielded the most region-specific distribution. All five of the North informants produced *Mexico3*, which is less culturally appropriate compared to *Mexico1* and *Mexico2*. Three of the five informants from the Delta also produced *Mexico3*. Four of the five Central informants produced the citation form of MEXICO. Interestingly, there was a wide variety of signs used for regional locations; however, there were no consistencies that would suggest geographical sign names are specific to a particular regional category. All the possible variants for COAST and BEACH were produced at least once. Interestingly, more informants preferred to fingerspell the names of locations rather than produce a sign. Out of the 17, five preferred to fingerspell COAST and 3 preferred to fingerspell BEACH. Remarkably, none of the informants produced a sign for DELTA; all preferred to fingerspell it. The informants indicated that most of the towns in the Delta, despite their popularity, have particular signs.

Target Item	North	Delta	Central	Coast
Japan				
Japan1	1	2	4	1
Japan2	2	2	1	1
Japan3	1	0	0	0
Japan FS	1	0	0	0
Japan N/A	0	1	0	0
China				
China1	1	2	5	1
China2	3	0	0	0
China3	1	2	0	1
China N/A	0	1	0	0
Mexico				
Mexico1	0	0	4	0
Mexico2	0	0	1	1
Mexico3	5	3	0	1
Mexico FS	0	1	0	0
Mexico N/A	0	1	0	0
Italy				
Italy1	4	3	4	2
Italy2	0	0	1	0
Italy3	0	0	0	0
Italy FS	1	1	0	0
Italy N/A	0	1	0	0
Germany				
Germany1	5	5	5	2
Germany2	0	0	0	0
Germany N/A	0	0	0	0
Coast				
Coast1	0	2	0	0
Coast2	1	0	0	0
Coast3	1	0	0	0
Coast4	0	1	0	0
Coast FS	3	0	5	2
Coast N/A	0	2	0	0
Beach				
Beach1	1	1	0	0
Beach2	1	0	0	0
Beach3	0	1	0	0
Beach4	0	1	0	0
Beach5	0	1	0	0
Beach6	0	0	1	0
Beach7	2	0	1	0
Beach FS	1	1	3	2
Mississippi				

Mississippi1	1	1	0	0
Mississippi2	0	1	0	0
Mississippi3	0	1	0	0
Mississippi4	0	0	0	1
Mississippi FS	4	2	5	0
Mississippi N/A	0	0	0	1
Delta				
Delta FS	5	5	5	2

Table 28: Informant responses for countries and region terms according to region

3. Animals

This responses in this semantic category yielded more phonological variants of animal name signs than lexical variants. For instance, the difference the variants for FISH were distinguished by movement direction. The signs produced either moved forward, backward, or remained stationary. The other four sign parameters for this target item (handshape, location, orientation, and non-manual markers) remained the same. Nine of the 17 informants produced the third variant of FISH, which remained stationary. Like FISH, the responses to the SHRIMP picture yielded responses that varied by movement direction. Ten of the 17 informants produced the citation form of the target item, and nine produced the second variant. Variants for SHRIMP, COW, DEER, CAT, and CRAWFISH could be articulated with either one or two hands and will be discussed in a later section.

The target items that elicited the most remarkable variation were: GOAT, CHICKEN, and RABBIT. Variants for each of the signs either deleted or added a segment, or part, to the citation form. The equivalent in spoken language would be the addition or deletion of a sound in a word.

The preferred variants for GOAT were *Goat1* and *Goat3*. The former is the citation form, which is produced with the S-shaped hand moving to a V-shaped hand on the forehead. The latter

is produced by forming an S-shaped hand followed by a V-shaped hand at the chin, nose, and forehead. In the latter variant an additional handshape, hold, and movement were produced. The preferred variant for CHICKEN was *Chicken4*, which was produced by forming a 3-shaped hand at the forehead or the chin. The former is the sign for ROOSTER. The photos shown during for this target item were of a rooster and a chicken (see Figures 54 and 55). Other variants of CHICKEN mimic a chicken's beak, often pecking at the ground. It is possible that informants were basing their sign on the gender of the chicken in the more prominent picture.

Out of the items in the animal semantic category, RABBIT yielded the most region-specific variation. Four out of five informants in the North produced the citation form of the target item. Each of the five informants in the Delta produced a different variant. All five of the informants in the Central region produced *Rabbit2*, and both of the informants on the Coast produced the citation form.

Target Item	North	Delta	Central	Coast
Fish				
Fish1	0	0	1	0
Fish2	3	3	1	0
Fish3	2	2	3	2
Catfish				
Catfish1	4	3	3	1
Catfish2	1	0	0	0
Catfish3	0	1	0	0
Catfish4	0	0	0	1
Catfish FS	0	1	2	0
Shrimp				
Shrimp1	3	2	2	2
Shrimp2	2	2	3	0
Shrimp3	0	1	0	0
Cow				
Cow1	5	5	5	2
Deer				
Deer1	5	4	4	1
Deer2	0	1	1	1

Goat				
Goat1	2	1	2	0
Goat2	0	0	1	1
Goat3	3	3	1	0
Goat4	0	0	0	1
Goat5	0	1	0	0
Goat6	0	0	1	0
Chicken				
Chicken1	1	1	2	1
Chicken2	0	1	0	0
Chicken3	1	0	0	0
Chicken4	3	1	2	1
Chicken5	0	1	0	0
Chicken FS	0	0	1	0
Chicken N/A	0	1	0	0
Cat				
Cat1	2	3	2	1
Cat2	2	1	0	0
Cat3	1	0		1
Cat4	0	1	3	0
Crawfish				
Crawfish1	3	5	4	0
Crawfish2	0	0	0	0
Crawfish3	0	0	0	0
Crawfish4	1	0	0	0
Crawfish5	0	0	0	1
Crawfish6	0	0	1	0
Crawfish FS	1	0	0	1
Dog				
Dog1	5	3	5	2
Dog2	0	2	0	0
Rabbit				
Rabbit1	4	1	0	2
Rabbit2	1	1	5	0
Rabbit3	0	1	0	0
Rabbit4	0	1	0	0
Rabbit5	0	1	0	0

Table 29. Informant responses for animal terms according to region

Figures 57 and 58. Photos for the lexical target CHICKEN (note the second photo is of a rooster)

4. Initialization

Out of the 17 informants, nine initialized the sign for PARENTS. Four out of five informants from the North initialized the sign. Three out of the five from the Delta also initialized the sign. The variants for CHINA and JAPAN were initialized only when they were signed near the corners of the eyes. There were only two instances in which RABBIT was initialized, and both occurred in the Delta.

Target Item	North	Delta	Central	Coast
Rabbit	0	2	0	0
Parents	4	3	2	0
Japan	2	2	1	1
China	3	0	0	0

Table 30. Initialized responses according to region

5. Handedness

As previously mentioned, handedness is a feature in which a sign can be produced with either one or two hands without affecting meaning. For the lexical target SHRIMP, 15 out of the 17

informants preferred to use one hand instead of two. Handedness for COW was distributed fairly evenly. Nine out of 17 used one hand, and eight used two hands. Sixteen out of 17 informants preferred to use two hands for DEER, with three of the 17 informants using the *Deer2* variant which extends the antlers being represented through the sign. Interestingly, all the informants from the North and Delta used two hands to sign GRANDMOTHER, and all but one used two hands to sign GRANDFATHER.

Target Item	North	Delta	Central	Coast
Shrimp	4	4	5	2
Cow	5	2	0	2
Deer	0	0	1	0
Cat	5	2	5	2
Crawfish	0	0	2	1
Grandmother	0	0	2	1
Grandfather	0	1	3	1

Table 31. One-handed responses according to region

Target Item	North	Delta	Central	Coast
Shrimp	1	1	0	0
Cow	0	3	5	0
Deer	5	5	4	2
Cat	0	3	0	0
Crawfish	5	5	3	1
Grandmother	5	5	3	1
Grandfather	5	4	2	1

Table 32. Two-handed responses according to region

B. Age

Informants were divided into four separate age groups: 18-33, 34-49, 50-64, and 65+. Each of the 17 informants were placed in a particular category (See Table 33).

Age Groups	Number of Informants
18-33	4
34-49	4
50-64	4
65+	5

Table 33. Distribution of informants according to age

1. Kinship

Similar to region, the age category showed a higher production for certain signs over others in the kinship semantic category, with BROTHER and SISTER being the most remarkable. Out of the four informants in the 18-33 age category, three preferred *Brother7.* The 34-49 age range did not have a strong affiliation with any variant of BROTHER. Two of the four in the 50-64 category preferred *Brother7,* as well as all five in the 65+ category. Interestingly, *Brother5* and *Brother6* were produced. There was also a high use of *Sister4* compared to the other four variants. Eleven of the 17 informants preferred the citation form of STEPMOTHER and STEPFATHER.

Target Item	**18-33**	**34-49**	**50-64**	**65+**
Mother				
Mother1	4	4	4	5
Brother				
Brother1	0	1	0	0
Brother2	0	1	1	0
Brother3	0	1	0	0
Brother4	1	0	0	0
Brother5	0	0	0	0
Brother6	0	0	0	0
Brother7	3	1	2	5
Father				
Father1	4	4	4	5
Sister				
Sister1	0	1	1	1
Sister2	1	0	0	0
Sister3	0	0	0	0
Sister4	2	2	3	4
Sister5	1	1	0	0
Parents				
Parents1	4	4	4	5
Grandmother				

Grandmother1	4	4	4	5
Grandfather				
Grandfather1	4	4	4	5
Stepmother				
Stepmother1	4	2	2	3
Stepmother2	0	1	1	0
Stepmother3	0	1	0	0
Stepmother FS	0	0	1	2
Stepfather				
Stepfather1	4	2	3	2
Stepfather2	0	1	1	0
Stepfather3	0	1	0	0
Stepfather4	0	0	0	1
Stepfather FS	0	0	0	1
Aunt				
Aunt1	4	4	3	5
Aunt2	0	0	1	0
Uncle				
Uncle1	4	4	3	5
Uncle2	0	0	1	0

Table 34. Informant responses for kinship terms according to age

2. Countries and Regions

Country name signs showed an interesting distribution based on age. The majority of informants in the 18-33 and 34-49 produced the citation form for JAPAN and CHINA, which are more culturally sensitive than other variants. Informants in the 50-64 and 65+ group showed a stronger affiliation for the traditional variants of the target items, which are considered less culturally appropriate. Nine of the 17 informants preferred the less culturally appropriate variant for MEXICO. Interestingly, the informants in the youngest age category made up five of the nine informants that produced this variant.

Target Item	18-33	34-49	50-64	65+
Japan				
Japan1	3	3	1	1
Japan2	1	0	3	3
Japan3	0	0	0	0
Japan FS	0	0	0	1
Japan N/A	0	1	0	0
China				
China1	3	3	2	1
China2	0	0	2	2
China3	0	0	0	3
China N/A	0	1	0	0
Mexico				
Mexico1	0	2	1	1
Mexico2	0	1	1	0
Mexico3	4	0	2	3
Mexico FS	0	0	0	1
Mexico N/A	0	1	0	0
Italy				
Italy1	4	2	3	4
Italy2	0	1	0	0
Italy FS	0	0	1	1
Italy N/A	0	1	0	0
Germany				
Germany1	4	3	4	5
Germany2	0	0	0	0
Germany N/A	0	1	0	0
Coast				
Coast1	2	0	0	0
Coast2	0	0	0	1
Coast3	1	0	0	0
Coast4	1	0	0	0
Coast FS	0	3	4	3
Coast N/A	0	1	0	1
Beach				
Beach1	1	0	1	1
Beach2	0	0	0	0
Beach3	1	0	0	0
Beach4	1	0	0	0
Beach5	1	0	0	0
Beach6	0	0	1	0
Beach7	0	0	1	2
Beach FS	0	4	1	2
Mississippi				
Mississippi1	2	3	4	4

Mississippi2	1	0	0	0
Mississippi3	1	0	0	0
Mississippi4	0	1	0	0
Mississippi N/A	0	0	0	1
Delta				
Delta FS	4	4	4	5

Table 35. Informant responses for region and country terms according to age

3. Animals

The preference for certain variants for animal sign names in the Age social category yielded similar results as the Region social category. Eight of the 17 informants preferred the *Fish3* variant, which remains in a stationary location the two other FISH variants. Fourteen informants produced the citation form for DEER. The division of responses for age in this semantic category did not indicate any strong affiliation to a particular sign variant that would suggest age as an influential social factor.

Target Item	18-33	34-49	50-64	65+
Fish				
Fish1	1	1	0	0
Fish2	2	1	2	2
Fish3	1	2	2	3
Catfish				
Catfish1	3	2	2	4
Catfish2	0	0	1	0
Catfish3	1	0	0	0
Catfish4	0	1	0	0
Catfish FS	0	1	1	1
Shrimp				
Shrimp1	1	3	1	4
Shrimp2	3	1	3	
Shrimp3	0	0	0	1
Cow				
Cow1	4	4	4	5
Deer				
Deer1	3	2	4	5

Deer2	1	2	0	0
Goat				
Goat1	1	2	1	1
Goat2	0	1	1	0
Goat3	3	1	2	1
Goat4	0	0	0	1
Goat5	0	0	0	1
Goat6	0	0	0	1
Chicken				
Chicken1	0	0	3	2
Chicken2	0	1	0	0
Chicken3	1	0	0	0
Chicken4	1	2	1	3
Chicken5	1	0	0	0
Chicken FS	1	0	0	0
Chicken N/A	0	1	0	0
Cat				
Cat1	3	3	1	1
Cat2	0	0	2	2
Cat3	0	0	0	2
Cat4	1	1	2	0
Crawfish				
Crawfish1	3	2	3	4
Crawfish2	1	0	0	0
Crawfish3	0	0	0	0
Crawfish4	1	0	0	0
Crawfish5	0	1	0	0
Crawfish6	0	1	0	0
Crawfish FS	0	0	1	1
Dog				
Dog1	2	4	4	5
Dog2	2	0	0	0
Rabbit				
Rabbit1	1	1	2	3
Rabbit2	2	2	2	1
Rabbit3	0	1	0	0
Rabbit4	0	0	0	1
Rabbit5	1	0	0	0

Table 36. Informant responses for animal terms according to age

4. Initialization

There were noticeable divisions among the recorded initialized responses. Three of the four informants in the 18-33 age category initialized the sign for PARENTS, as did approximately half of the informants from each of the remaining age categories. Another division among the responses occurred with the initialized variants for CHINA and JAPAN, which were produced by informants in the 50-64 and 65+ age categories.

Target Item	18-33	34-49	50-64	65+
Rabbit	1	1	0	0
Parents	3	2	2	2
Japan	1	0	2	3
China	0	0	2	1

Table 37. Number of initialized responses according to age

5. Handedness

Handedness was divided by Age social category produced similar results as the responses from the Region social category. Fourteen of the 17 informants produced GRANDMOTHER with two hands, and 13 produced GRANDFATHER with two hands. Sixteen informants produced DEER with two hands.

Target Item	18-33	34-49	50-64	65+
Shrimp	4	4	4	3
Cow	1	4	4	5
Deer	0	0	1	0
Cat	1	4	4	5
Crawfish	0	2	2	0
Grandmother	0	2	1	0
Grandfather	1	2	2	0

Table 38. One-handed responses according to age

Target Item	18-33	34-49	50-64	65+
Shrimp	0	0	0	2
Cow	3	0	0	0
Deer	4	4	3	5
Cat	3	0	0	0
Crawfish	4	2	2	5
Grandmother	4	2	3	5
Grandfather	3	2	2	5

Table 39. Two-handed responses according to age

C. Ethnicity

Recent studies (Lucas et. al, 2001; McCaskill et. al, 2011) concerning ASL variation related to African American deaf signers state that Black Deaf signers' language can be distinguished phonologically, lexically, through handedness, and signing space. Indeed, Black ASL is considered a distinct variety of ASL (McCaskill et. al, 2011, p. 4), as African American English is a distinct variety of English. Interestingly, the data collected in this study did not yield any distinguishing factors between African American and Caucasian signers in Mississippi. Of the 17 informants, only five were African American, and were from the North and the Delta. It is very likely that such a small group of informants are not representative of the African American Deaf community in Mississippi.

1. Kinship

The data analyzed with previous social factors (i.e. region and age) yielded similar results with regards to the preference for certain target item variants. *Brother7* is still the most commonly used variant of BROTHER, and *Sister4* is the preferred variant of SISTER. The citation forms for STEPMOTHER and STEPFATHER are the most frequently produced variants of the target items.

Target	Caucasian	African American
Mother		
Mother1	12	5
Brother		
Brother1	1	0
Brother2	2	0
Brother3	0	1
Brother4	1	1
Brother5	0	0
Brother6	0	0

Brother7	8	3
Father		
Father1	12	5
Sister		
Sister1	3	0
Sister2	0	1
Sister3	0	0
Sister4	9	2
Sister5	0	2
Parents		
Parents1	12	5
Grandmother		
Grandmother1	12	5
Stepmother		
Stepmother1	7	4
Stepmother2	2	0
Stepmother3	0	1
Stepmother FS	2	0
Stepfather		
Stepfather1	6	4
Stepfather2	2	0
Stepfather3	0	1
Stepfather4	1	0
Stepfather FS	3	0
Aunt		
Aunt1	11	5
Aunt2	1	
Uncle		
Uncle1	11	5
Uncle2	1	

Table 40. Informant responses for kinship terms according to ethnicity

2. Countries and Regions

There was an equal number of distribution for the name signs for JAPAN, CHINA, and MEXICO. Six of the 12 Caucasian informants used the citation form for JAPAN, as did two out of the five African American informants. After observing the recorded interviews, it was noted that the two African American informants who used the citation forms for JAPAN and CHINA were both in the 18-33 age category. Informants from both categories also preferred the more

traditional form of MEXICO compared to the more recent, culturally appropriate version. Informants in the Caucasian category largely preferred to fingerspell regional locations of Mississippi such as BEACH and COAST, while informants in the African American category typically produced a sign. Two of the five African American informants used the citation form for COAST, and all five produced a different variant for BEACH. Interestingly, there were more instances of African American informants producing a sign for MISSISSIPPI than Caucasian informants. Eleven of the 12 Caucasian informants used the citation form of MISSISSIPPI, in which the first four letters are finger-spelled. Two of the five African American informants produced lexical variants of MISSISSIPPI. One informant noted her preferred sign, *Mississippi2*, is the sign used in Alabama. This sign is produced by combining the sign for MISS, (ex. I *miss* you) and the letter –i. Another informant said she had seen her preferred sign, *Mississippi3*, in another state. This sign was produced by combining the sign for MISS and WRONG, implying that many of the traditions and practices in Mississippi are wrong.

Target Item	**Caucasian**	**African American**
Japan		
Japan1	6	2
Japan2	4	2
Japan3	1	0
Japan FS	1	0
Japan N/A	0	1
China		
China1	7	2
China2	2	1
China3	3	1
China N/A	0	1
Mexico		
Mexico1	4	0
Mexico2	2	0
Mexico3	5	4
Mexico FS	1	0
Mexico N/A	0	1

Italy		
Italy1	9	4
Italy2	1	0
Italy3	0	0
Italy FS	2	0
Italy N/A	0	1
Germany		
Germany1	12	4
Germany2	0	0
Germany N/A	0	1
Coast		
Coast1	0	2
Coast2	1	0
Coast3	1	0
Coast4	0	1
Coast FS	9	0
Coast N/A	1	1
Beach		
Beach1	2	0
Beach2	1	0
Beach3	0	1
Beach4	0	1
Beach5	0	1
Beach6	1	0
Beach7	2	1
Beach FS	6	1
Mississippi		
Mississippi1	11	3
Mississippi2	0	1
Mississippi3	0	1
Mississippi4	1	0
Delta		
Delta FS	12	5

Table 41. Informant responses for region and country terms according to ethnicity

3. Animals

Animal sign name responses were similar as other social categories. There was a strong affiliation from both groups to the citation form of CRAWFISH. All five African American informants used the citation form, as did six of the 12 Caucasian informants. There was a

preference for the citation form of CHICKEN and the variant *Chicken4* among the Caucasian signers. Two out of the five African American informants also preferred the fourth variant. The African American informants were the only informants who produced the traditional sign for DOG. Two out of the five produced the combination form of the sign, which begins with slapping the side of the leg and snapping the fingers as if to call a dog. All 12 of the Caucasian informants and three of the African American informants deleted the first part of the combination and only snapped their fingers.

Target	**Caucasian**	**African American**
Fish		
Fish1	2	0
Fish2	3	4
Fish3	7	1
Catfish		
Catfish1	8	3
Catfish2	0	1
Catfish3	0	1
Catfish4	1	0
Catfish FS	3	0
Shrimp		
Shrimp1	6	3
Shrimp2	5	2
Shrimp3	1	0
Cow		
Cow1	12	5
Deer		
Deer1	10	4
Deer2	2	1
Goat		
Goat1	4	1
Goat2	2	0
Goat3	3	4
Goat4	1	0
Goat5	1	0
Goat6	1	0
Chicken		
Chicken1	5	0

Chicken2	0	1
Chicken3	1	0
Chicken4	5	2
Chicken5	0	1
Chicken FS	1	0
Chicken N/A	0	1
Cat		
Cat1	4	4
Cat2	3	0
Cat3	2	0
Cat4	3	1
Crawfish		
Crawfish1	6	5
Crawfish2	1	0
Crawfish3	0	0
Crawfish4	1	0
Crawfish5	1	0
Crawfish6	1	0
Crawfish FS	2	0
Dog		
Dog1	12	3
Dog2	0	2
Rabbit		
Rabbit1	5	2
Rabbit2	6	1
Rabbit3	0	1
Rabbit4	1	0
Rabbit5	0	1

Table 42. Informant responses to animal terms according to ethnicity

4. Initialization

None of the informants in the Caucasian category initialized the sign for RABBIT, but two of the five African American informants did. Five of the 12 Caucasian informants initialized PARENTS, as did four of the five African American informants. Four Caucasian informants initialized JAPAN, but only two initialized CHINA. Two African American informants also initialized JAPAN, but only one initialized CHINA. Unlike the Age social category, this social category does not suggest ethnicity as an influential factor for sign initialization.

Target Item	Caucasian	African American
Rabbit	0	2
Parents	5	4
Japan	4	2
China	2	1

Table 43. Number of initialized responses according to ethnicity

5. Handedness

The number of responses according to handedness presented similar to previous social categories. Most informants used two hands to produced DEER, CRAWFISH, GRANDMOTHER, and GRANDFATHER. The distribution of these numbers does not suggest ethnicity as an influential factor. This will be discussed in a later section.

Target Item	Caucasian	African American
Shrimp	10	5
Cow	12	2
Deer	1	0
Cat	12	2
Crawfish	4	0
Grandmother	3	0
Grandfather	4	1

Table 44. One-handed responses according to ethnicity

Target Item	Caucasian	African American
Shrimp	2	0
Cow	0	3
Deer	11	5
Cat	0	3
Crawfish	8	5
Grandmother	9	5
Grandfather	8	4

Table 45. Two-handed responses according to ethnicity

D. Education, Hearing Status of Parents, and Socioeconomic Status

After initial analysis, it was determined that education, parental hearing status, and socioeconomic status could not be adequately measured, due to the limited number of informants. The design of this study did not place a restriction on the number of participants, in order to have an appropriate representation of the language features employed by Deaf Mississippians. As was mentioned, educational status was categorized based on the type of school attended: mainstream/oral schools, deaf residential schools, or both. Approximately half of the informants attended both. They started out at a mainstream/oral school and later transferred to a deaf residential school. Many of the informants started out being taught by the Oral Approach, which does not utilize any manual language features. Instead, learners were taught to read lips and to try to hear sounds with the assistance of amplification devices. ASL was later learned when students transferred to deaf residential schools.

Fifteen out of 17 informants had parents who were hearing and acquired ASL through educational system and affiliation with other Deaf people. As stated in the literature review, approximately 95 percent of deaf children are born to non-deaf parents. While some families in Mississippi have multiple generations of deaf people, only one such family volunteered to participate in this study. Socioeconomic status was also unmeasurable. Only two informants were currently employed. One was categorized as a blue-collar worker, and one worked at the school for the deaf as an instructor. The other informants either collected disability or were retired. The lack of variation in this social factor prevented this study from clearly being able to identify features of language that could be influenced by socioeconomic status.

CHAPTER VI
DISCUSSION AND CONCLUSION

In the attempt to identify phonological and lexical variation of ASL in Mississippi and possible social correlations, this pilot study observed three semantic categories in which variation exists. It recorded the various means by which certain lexical items vary as a result of influential social elements. This study suggests that age is the predominant influence for variation. Age is intertwined with several other social factors that, when stand alone, do not appear to be as influential in this particular study. This study suggests the other social factors are influences, but on a larger scale. Past studies (cite Ceil Lucas, Woodard, Palmer, etc.) concerning variation in ASL have been conducted over a larger geographic area and with a much larger population. Prior research has emphasized the need for more in-depth studies concerning ASL variation so that isoglosses can be found, and language change can be recorded. While small, this study contributes the growing body of knowledge on ASL and its users by highlighting linguistic practices among some of its users.

A. Region

The data yielded little variation within the specified regions of Mississippi that suggests geographic location is not significant for variation in Mississippi. The only noticeable differences were found in the Countries/Region semantic category and in initialization. Informants from the Central category preferred the more culturally appropriate signs for country name signs. The

explanations for this are (1) the metropolitan area found in this region and (2) a large, diverse population. Central Mississippi is home to the state capital and the Mississippi School for the Deaf, the state-operated residential school for deaf and hard of hearing students. Urban areas provide more educational and employment opportunities for Deaf people, which is especially true in Mississippi.

The data also showed more of a tendency for people in the North and Delta areas of the state to initialize signs, such as PARENTS. Three possible social factors contribute to this variation: region, age, and type of education. Deaf students in the south who do not attend a residential school for the deaf usually attend a public or mainstream school, which has either a Deaf Education teacher or an interpreter to work with the deaf student. Deaf children in mainstream schools do not have the same exposure to ASL as students enrolled in deaf schools. Additionally, mainstream schools typically hire non-deaf professionals to work with deaf students, so that language models for ASL are usually second language users. Age is a considering variable because of the educational method used by educators when children attended schools. The Oral Method was employed by educators from the late 1800s until the 1960s. Manually Coded English (MCE) systems were then established to help teach deaf children how to read lips, read text, and write. MCE system paved the way for the Simultaneous Communication approach, in which a person signed and spoken simultaneously. It was not until ASL was recognized as a legitimate language that its use slowly began to emerge in the classrooms. Students instructed under these methods still use some of the signs established by the MCE systems, particularly initialized signs. Systems of MCE and older teaching methods are still widespread and are popular in certain educational settings, especially in those with limited resources for deaf students.

Overall, geographic location does not appear to be an influential factor for ASL variation in Mississippi. Other studies (Johnson, 1996, Lucas et. al, 2001; Palmer et. al, 2012; Woodward, 1976) have proven that geographic location is a critical factor in which language variation is based. Indeed, the basis of sociolinguistic research is on the premise that people use language in a way that is unique to their geographic location. It can be suggested, then, that isoglosses for ASL are not found within the geographic boundaries of Mississippi, but that Mississippi may be included in a larger pocket of regional variation.

B. Age

Age was the most prominent social factor contributing to the recorded target items. The data indicated that younger informants preferred newer signs, while older informants preferred more traditional variants of signs. Informants in the 65+ age category still preferred to produce older variants of the target items than younger variants. This was especially true with signs for countries and kinship items. Particularly, informants in the 65+ age category produced signs for CHINA and JAPAN that highlighted the physical features of East Asian people. Informants in the older age groups also tended to initialized CHINA and JAPAN. Since both target items can be produced with the index finger, initialization helps clarify the country (or group) being discussed. All the age groups continued to use two hands for signs that were traditionally articulated with two hands. Target items such as GRANDMOTHER and GRANDFATHER can be produced with only one hand, but the majority of informants in this study preferred the two handed method.

C. Ethnicity

Past studies (McCaskill et. al, 2011; Lucas et. al, 2001; Woodward, 1976) identified the linguistic features employed by African American Deaf signers, concluding that there are variations of ASL whose social influences are consistent with influences found in American English. Woodward (1976) posited that school segregation and limited contact with Caucasian deaf people contributed to the linguistic features of ASL associated with Black ASL. This study compared responses of Caucasian and African American informants. There were no other ethnicities represented. The data did not show any distinguishing factors that would suggest ethnicity as an influential social factor in Mississippi. There are three possible explanations: (1) the study was limited in its scope and did not elicit target items that contain notable variation; (2) variation in ASL based on ethnicity may not be as notable in Mississippi as it is in other parts of the country, and; (3) the geographic area of this study was not large enough to provide a representative sample of African American Deaf people. It is also possible that all three of the aforementioned explanations are viable. The study limited the analysis of responses to three semantic categories because of the overwhelming number of responses collected for the 100+ target items shown in the interviews. They were chosen because each contained lexical items that had been used in past studies, and had yielded phonological or lexical variation. It is also possible that the limited number of African American informants in this study did not accurately represent the linguistic variation of African American Deaf Mississippians. There were five African American participants in this study and 12 Caucasians. Four of the five African American informants were from the Delta, and one was from the North, so the demographic composition of the Central and Coastal informants was not an accurate representation of their respective populations. It is possible that features of Black ASL

are found throughout the state of Mississippi and are more commonly used than other varieties. Lastly, Mississippi may not contain any isoglosses or dialect borders, indicating additional studies to be conducted at the state level in order identify such areas of variation.

D. Implications

This study is the first of its kind that has examined variation of ASL within the boundaries of a state. Features of phonological and lexical variation were observed in each of the three semantic categories observed. In the kinship category, the variant *Brother7* and *Sister4* were produced the most. The items MOTHER, FATHER, GRANDMOTHER, and GRANDFATHER did not contain any notable variations, with the exception of handedness for GRANDMOTHER and GRANDFATHER. Initialization of PARENTS was produced more among informants in the North than other regions, and among younger informants. In the countries and regions category, the data showed that older informants from non-urban areas preferred more traditional signs for countries than younger informants or informants from urban areas. Interestingly, geographic locations in Mississippi tended to be spelled more than assigned a particular sign. Lastly, the animal semantic category indicated that informants still preferred the two-handed sign for DEER, but that they sign for COW is typically produced with one hand. The variants for FISH and SHRIMP were determined to be phonological, with the only varying parameter to be movement. They can be likened to the sign for DEAF, which can be produced from ear to chin, or chin to ear. None of the social factors analyzed in this study could be attributed to the variation seen between the two signs.

The variation recorded suggests that age and region are the two major contributors, with education being an underlying factor that played a role in each of the two social factors. Ethnicity did not prove to be an influential factor. The size of the study and number of willing participants

did not yield a population that allowed for education, socioeconomic status, or parental hearing status to be observable factors.

E. Contributions

This study is a small contribution a field that is relatively young compared to other areas of sociolinguistic research, yet this work can be used in multiple areas of study. Firstly, this research is the basis for more in-depth sociolinguistic research at the state level. Sociolinguistic research in ASL is relatively new, so there are still many facets of that have not been explored. Secondly, the data collected lends itself to larger corpora that can be used to further determine ASL isoglosses. Regional variation maps help identify geographical areas in which language use changes. Past studies have constructed such maps (Lucas et al., 2003, pp. 23-60) on a larger scale, which has guided researchers towards identifying types of language change and the areas in which they occur. ASL should be documented so that changes can be observed and so the language can be preserved. Thirdly, this type of research is applicable to many areas of study and professions. Studies like this lend themselves to educational programs that focus on deafness and communication such as Deaf Education and interpreter training programs. These studies are essential tools for teachers of second languages for both hearing and deaf students. They allow students learning ASL as a second language to gain a better understanding of Deaf culture.

A primary goal in any sociolinguistic research is to "give back" to the community of language users. Most importantly, this study reciprocates the willingness and generosity of the Deaf community to share their language and cultural norms with students and professionals. It reiterates the complexity and versatility of a language and its users, while contributing to a growing body of research.

F. Suggestions

This study only scratches the surface of variationist research with visual languages and, like its predecessors, serves as a model for future studies. Further studies need to be conducted in order to capture an accurate description of ASL and the elements that contribute to its variation and change. A great deal of information was obtained from the small number of participants in this study, but it is suggested that future studies obtain a larger, more comprehensive representation of the population in a given area. Future studies should continue to focus on lexical items that may be considered region-specific, as well as items that have shown a tendency to produce variation.

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APPENDICES

APPENDIX A: INTERVIEW SCHEDULE

Interview Questions: Part I

1. Can you tell me about your family background? Where is your family from? What is your ancestral background?
2. How old are you?
3. What was it like growing up deaf? Did you grow up in Mississippi? Where in Mississippi did you live when you were young? Does your hometown have a sign name? What about where you live now?
4. Were/Are your parents deaf or hearing? Did they learn ASL? How did you communicate with them?
5. What were your parents like when you were young? Where they strict or lenient?
6. Do you have any brothers or sisters? Are they deaf or hearing? Did they learn to sign? Do you have any other relatives that are Deaf? Do any of your relatives know ASL?
7. Where did you go to school? Was it a school for the deaf or a mainstream school? Why did you go to school there? Did you have an interpreter? Was s/he the only hearing person that knew sign language? Were there other deaf students? Did you hang out after school or participate in after school activities?
8. Tell me a story or experience you remember from school. Do you have a funny story or anything that stands out?
9. How long were you in school?

10. Did you go to college? If so, what degree did you earn?
11. When did you learn ASL? Tell me about your memories of learning how to sign
12. What is your favorite kind of food? How do you prepare it?
13. Do you like to cook?
14. Do you have any children? Grandchildren (if applicable)? Do they know ASL?
15. Do you have any hobbies or interests? What are they?

INTERVIEW: PART II – SLIDES 1 - 30

1. (PIZZA)
2. (TOMATO)
3. (FISH)
4. (CATFISH)
5. (SHRIMP)
6. (PUMPKIN)
7. (COW)
8. (COAT/JACKET)
9. (COMPUTER)
10. (LAPTOP)
11. (CAKE)
12. (DEER)
13. (PICNIC)
14. (MICROWAVE)

15. (PREGNANT)

16. (COOKIE)

17. (GOAT)

18. (CHICKEN)

19. (WATERMELON)

20. (CAT)

21. (BANANA)

22. (HALLOWEEN)

23. (COUCH/SOFA)

24. (BISCUIT)

25. (CRAWFISH)

26. (DOG)

27. (SALT AND PEPPER)

28. (RABBIT)

29. (BIRTHDAY)

INTERVIEW: PART III SLIDES 30-99

Each slide contains the English gloss for lexical items in ASL.

30. DEAF

31. KNOW

32. YESTERDAY

33. MONDAY

34. TUESDAY

35. WEDNESDAY

36. THURSDAY

37. FRIDAY

38. SATURDAY

39. SUNDAY

40. 16

41. 17

42. 18

43. 19

44. WONDERFUL

45. KNOW

46. NO

47. AND

48. EARLY

49. SUN

50. TOMORROW

51. MOTHER

52. BROTHER

53. FATHER

54. SISTER

55. PARENTS

56. GRANDMOTHER

57. GRANDFATHER

58. STEPMOTHER

59. STEPFATHER

60. AUNT

61. UNCLE

62. SOON

63. TODAY

64. YESTERDAY

65. CAR

66. JAPAN

67. NERVOUS

68. CHINA

69. STARS

70. MOON

71. THANKSGIVING

72. CHRISTMAS

73. UNDERWARE

74. CAKE

75. COOKIE

76. CHOCOLATE

77. WINTER

78. SUMMER

79. SPRING

80. MEXICO

81. ITALY

82. GERMANY

83. TORNADO

84. HURRICANE

85. COAST

86. BEACH

87. MISSISSIPPI

88. DELTA

89. DEAF SCHOOL

90. VIDEO PHONE

91. INTERPRETER

92. SIGN LANGUAGE

93. DOCTOR

94. THANK YOU

95. YOU’RE WELCOME

96. PREGNANT

97. TOWN/CITY

98. FLOOD

99. BIRTHDAY

APPENDIX B: INFORMANT BIOGRAPHIES

1. *1A3FDB1*

   Informant is a 50 year old African American female. She attended the Mississippi School for the Deaf while the school was being integrated. Informant did not attend college. She is the only person in her family that is deaf. She communicated with her parents using home signs and writing notes. She has three daughters who sign. One of her daughters is an interpreter. She works as a custodian at the Federal Building in Oxford, MS.

2. *2A3FMD4*

   Informant is a 55 year old Caucasian female. She attended both the Mississippi School for the Deaf and White Station High School in Memphis, TN, which is known for its deaf and hard of hearing students. The school employs deaf and hard of hearing teachers. This informant stated her teacher(s) signed. Informant did not attend college. She comes from a Deaf family. Her parents, brother, aunt, and uncle are deaf. The informant draws a disability check each month for being deaf. She lives in a rural setting near her parents and brother. The informant grew up using ASL. She has one son who is hearing, but can sign.

3. *3A4MDR4*

   Informant is a 77 year old Caucasian male. He attended the Mississippi School for the Deaf in Jackson, MS. He was offered a football scholarship, but turned it down. Informant is a former Deaf Olympian and won three gold medals. His parents were hearing, but his sister, wife, and two children are deaf. The informant is retired, but

worked for the U.S. Postal Service. He and his wife live in a rural setting near his two children.

4. *4A4FDR4*

   Informant is a 76 year old Caucasian female. She grew up deaf. She attended the Arkansas School for the Deaf. After she graduated she moved to California, but moved back home to Arkansas after a few years. She met her husband, who is also deaf, and moved to Mississippi after they got married. They had three children; all deaf. One child from being struck by lightning. She is retired from working in a factory. She and her husband live in a rural area near her two surviving children.

5. *5A1FMD4*

   Informant is a 31 year old Caucasian female. She has a set of grandparents that were deaf, but other than that, she is the only deaf person in her family. Her parents discovered she was born deaf when she was two years old. She attended a school in Memphis, TN that emphasized Oralism as a method to teach deaf children. She did not learn sign language until she was in junior high school. The informant attended a mainstream school. She was held back her senior year because her interpreter at school was unable to keep up with the teacher, which resulted in her failing her senior year. She made up the failed class (math) that summer. She attended a local community college, but did not obtain a degree. The informant held several blue collar jobs, working as a stock person in a clothing store or dish washer at a local restaurant, but health problems forced her to quit and draw a disability check.

6. *1B4MDR4*

Informant is a 66 year old Caucasian male. He was born and raised in Mississippi. He attended Mississippi School for the Deaf during segregation. Most of his family is from Mississippi, but he recalls having a few family members in Arkansas. He has lived in the Delta all of his life (with the exception of living at MSD). He worked as a traveling farmhand until he was physically unable to do the work.

7. *2B1FDD1*

   Informant is a 27 year old African American female. She was born and raised in Lambert, Mississippi. She went to the Mississippi School for the Deaf when she was five years old and lived in the residential dorms there until she graduated. She is the only deaf person in her family. Nobody in her family knows sign language. She has two small children, both hearing. She attended a local community college and transferred to a four year university pursuing a degree in Social Work.

8. *3B1FBD1*

   Informant is a 27 year old African American female. She was born and raised in the Delta. She transferred to the Mississippi School for the Deaf when she was ten years old. Before than she attended mainstream schools in Clarksdale. She graduated from MSD in 2007. A few people in her family know the manual alphabet, as she is the only deaf person in her family. She is currently unemployed and draws SSI.

9. *4B1MBB1*

   Informant is a 33 year old African American male. He became deaf when he was five or six years old due to a severe ear infection. He started out going to a public school, but transferred to the Mississippi School for the Deaf in 1993. He felt there were more

opportunities for him at MSD than there were in mainstream schools. While there, he learned ASL. His family communicated him with a system of home signs. As he progressed in is acquisition of ASL at MSD, he taught his parents more sign language. He stated that his parents used to sign, but do not sign much now due to their age. He works at a local business as a supervisor of product support technicians, and used to be a truck driver.

10. 5B2MMD1

Informant is a 45 year old African American male. He became deaf after he was born. His parents said it was because he was sick and got too many shots. He went to a public school in Clarksdale, and had interpreters in some of his classes. Nobody in his family knows how to sign. He communicates with his family by reading lips. He learned ASL by socializing with other local deaf people. He worked at the Post Office, but has been drawing SSI disability for several years now.

11. 1C3FMR4

Informant is a 61 year old Caucasian female. She was born deaf and attended a special Oral school for deaf children. She learned sign language from her deaf neighbors. One of her neighbors also went to the Oral school, but her older sister was fluent in ASL. She learned ASL from association with other deaf people. She worked at the Mississippi School for the Deaf, but is now retired.

12. 2C3FDR4

Informant is a 62 year old Caucasian female. She was born deaf in Louisiana in West Lafayette Parish. She attended the Louisiana School for the Deaf in Baton Rouge, and went to Gallaudet University (formerly Gallaudet College) where she obtained a Bachelor of Science degree in Home Economics. She moved to Mississippi and began working at the Mississippi School for the Deaf as a kindergarten teacher. She currently resides in Madison County in central Mississippi with her husband, who is also deaf and retired from the Mississippi School for the Deaf.

13. 3C4MDR4

Informant is a 65 year old Caucasian male. He was born deaf and was raised in Louisiana. He has a deaf brother and a sister that is hard of hearing. His grandmother on his mother's side was deaf. He started out going to a mainstream school, but when his family discovered he was not doing well because of his deafness in 2nd grade, he was sent to the Louisiana School for the Deaf. When he graduated he went to Gallaudet University and earned a Bachelor of Science is Sociology and Social Work. He worked at the Mississippi School for the Deaf as a counselor. He is currently retired and lives in Madison County with his wife, who is also deaf.

14. 4C2FBD4

Informant is a 40 year old Caucasian female. She was born deaf and was raised around the Jackson area in Mississippi. She is the only person in her family that is deaf, and nobody in her family knows ASL. She attended both a mainstream school and a school for the deaf. Informant grew up in an oral environment and did not learn ASL until

she went to the deaf school. She is married to a deaf man, has two children, and is a housewife. Her husband works at the Mississippi School for the Deaf as a teacher.

15. 5C2MDW4

Informant is a 41 year old Caucasian male. He was born deaf and has lived in Mississippi his entire life. He has several family members that are deaf, so he learned ASL at home from his parents and family members. Everyone in his family knows ASL. He went to the Mississippi School for the Deaf. He attended University of Southern Mississippi and earned a Bachelor of Science in Education. He currently teaches at the Mississippi School for the Deaf. Informant is married and has two children, all of whom are Deaf.

16. 1E2FBD4

Informant is a 35 year old Caucasian female. She is the only deaf person in her family. Her father was in the Air Force, so she travelled a lot when she was younger. She was born deaf, and attended both mainstream schools and Texas School for the Deaf (TSD). She went to mainstream schools until she reached high school, and then went to the deaf school. She had an interpreter when she attended mainstream schools. Both her parents learned ASL when they were told their daughter was deaf, so she learned ASL at home. She attended Gallaudet University and majored in Criminology, but changed her major to Business. She also attended University of Southern Mississippi. Currently she is a stay at home mother.

17. 2E4F_R4

Informant is a 74 year old Caucasian female. She is the only deaf person in her family. Her parents and her four sisters were all hearing. She was born and raised in Mississippi. She attended the Mississippi School for the Deaf. Informant stated that, when she was in school sign language was not allowed, and she grew up in an Oral environment. She does not remember how she learned sign language.

VITA

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Education
M.A., Modern Languages, concentration in TESL (present)
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B.A, Linguistics (2012)
University of Mississippi, University, MS

AAS, Interpreter Training Technology (2004)
Hinds Community College, Raymond, MS

Research Interests
Variation of American Sign Language, second language acquisition, ESL for d/Deaf learners, language & gender, variations of American English

Research Languages (in order of proficiency)
English (native speaker), American Sign Language

Academic Appointments
Graduate Instructor (2013 – 2014)
University of Mississippi, Intensive English Program
Research Assistant (2013 – 2014)
University of Mississippi, Teaching English as a Second Language (TESL)

Courses
University of Mississippi

- Intensive English
    - IE 044-2: Reading & Writing (August 2013)
    - IE 014: Beginner Grammar (Fall 2013)
    - IE 040: Introduction to World Cultures (Spring 2014)
    - IE 051: Topics in Intercultural Communication (August 2014)
    - IE 034: Advanced Grammar (Fall 2014)
    - IE 040: Introduction to World Cultures (Fall 2014)
    - IE 034: Advanced Grammar (Spring 2015)
- Linguistics
    - LING 435/599: Language & Gender (Fall 2013)

Academic Honors and Grants
University of Mississippi Graduate School Summer Research Grant Recipient (Summer 2013)

Publications
Refereed Articles
Burkette, A. & Blount, C. (2013). Blanket coverage: Pointers for conducting lexical research with Atlas data. *Southern Journal of Linguistics, 37*(2), 57-89.

Blount, C. (Forthcoming). The difference between deaf and Deaf: A cultural perspective. *American Speech*.

Presentations
(2013, April). *Patchwork Theory: Lexical Variation for the Lexical Item Quilt*. Paper presented at the South Eastern Conference on Linguistics, Spartanburg, SC.

(2013, October). *You sure do talk funny: A comparative analysis of phonological merging in Tennessee.* Paper presented at the Rocky Mountain Modern Language Association, Vancouver, WA.

(2014, October). *Coming out in Mississippi: Styles and Stances in the Documentary Small Town Gay Bar*. Paper presented at the Rocky Mountain Modern Language Association, Boise, ID.

(2015, April). *The History of American Sign Language*. Paper presented at University of Mississippi's Disability History Month, University, MS.

University Service
President of the Ole Miss Total Communications Club, 2011-2012
President of the Model United Nations organization, 2012-2013
Co-coordinator for the UM Community ESL Program, 2013-2014
Instructor for the UM Community ESL Program, 2013 – 2014
Modern Languages Senator for the Graduate Student Council, 2014

Community & Professional Service
Board Member-at-Large for the Mississippi Registry of Interpreters for the Deaf, 2011-2012
President of the Mississippi Registry of Interpreters for the Deaf, 2012-2014
Region II Co-Representative for the Bisexual, Lesbian, Gay, Intersexed, Transgendered Interpreters/Transliterators (BLeGIT) Member Section of the Registry of Interpreters for the Deaf, 2013 – 2015
Co-coordinator and Instructor of the University of Mississippi's Community ESL Program (CESL), 2013 - 2014

Professional Memberships
Registry of Interpreters for the Deaf (RID)
Mississippi Registry of Interpreters for the Deaf (MSRID)
Mississippi Association of the Deaf (MAD)
National Association of the Deaf (NAD)
Rocky Mountain Modern Language Association (RMMLA)
Sign Language Studies (SLS)